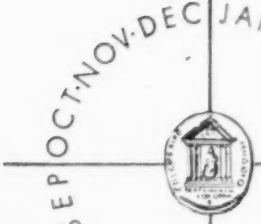

Quarterly Review of

PSYCHIATRY AND NEUROLOGY

Winfred Overholser, M.D.

editor-in-chief

INTERNATIONAL RECORD OF PSYCHIATRY AND NEUROLOGY

VOLUME 7 NO. 1 JANUARY 1952

Quarterly Review of Psychiatry and Neurology

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Incorporating the International Record of Psychiatry and Neurology

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INCORPORATING INTERNATIONAL RECORD OF PSYCHIATRY AND NEUROLOGY

FOREWORD

The purpose of the QUARTERLY REVIEW OF PSYCHIATRY AND NEUROLOGY is to present promptly brief abstracts, noncritical in character, of the more significant articles in the periodical medical literature of Europe and the Americas.

For readier reference, the abstracts are classified under the following general headings:

PSYCHIATRY

1. Administrative Psychiatry and Legal Aspects of Psychiatry
2. Alcoholism and Drug Addiction
3. Biochemical, Endocrinologic and Metabolic Aspects
4. Clinical Psychiatry
5. Geriatrics
6. Heredity, Eugenics and Constitution
7. Industrial Psychiatry
8. Psychiatry of Childhood
9. Psychiatry and General Medicine
10. Psychiatric Nursing, Social Work and Mental Hygiene
11. Psychoanalysis
12. Psychologic Methods
13. Psychopathology
14. Treatment
    - *a. General Psychiatric Therapy*
    - *b. Drug Therapies*
    - *c. Psychotherapy*
    - *d. The "Shock" Therapies*

NEUROLOGY

1. Clinical Neurology
2. Anatomy and Physiology of the Nervous System
3. Cerebrospinal Fluid
4. Convulsive Disorders
5. Degenerative Diseases of the Nervous System
6. Diseases and Injuries of the Spinal Cord and Peripheral Nerves
7. Electroencephalography
8. Head Injuries
9. Infectious and Toxic Diseases of the Nervous System
10. Intracranial Tumors
11. Neuropathology
12. Neuroradiology
13. Syphilis of the Nervous System
14. Treatment
15. Book Reviews
16. Notes and Announcements

In fields which are developing as rapidly as are psychiatry and neurology, it is obviously impossible to abstract *all* the articles published—nor would that be desirable, since some of them are of very limited interest or ephemeral in character. The Editorial Board endeavors to select those which appear to make substantial contribution to psychiatric and neurologic knowledge and which promise to be of some general interest to the readers of the REVIEW. Some articles, highly specialized in character or concerning a subject already dealt with in an abstract, may be referred to by title only at the end of the respective sections.

A section entitled INTERNATIONAL RECORD OF PSYCHIATRY AND NEUROLOGY is to be included at the beginning of the journal. The Record Section will consist of advanced clinical and experimental reports.

The Editorial Board will at all times welcome the suggestions and criticisms of the readers of the REVIEW.

WINFRED OVERHOLSER, M.D.
Editor-in-Chief

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Quarterly Review of **PSYCHIATRY AND NEUROLOGY**

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Current Avenues of Psychological Research in Projective Technics*

Claire M. Vernier, Ph.D.

Described, perhaps somewhat facetiously, as the offspring, legitimate or otherwise, of maternal psychiatry and paternal academic psychology, the steadily increasing family of the projective technics (now well over 225 in number) offers, at the very least, silent testimony to the creative urges of the parental stock. Officially delivered in 1939 as a term and a concept in an article by L. K. Frank, the projective technics may now be thought of as rapidly maturing adolescents faced with the problem of achieving adult status in a dynamic, holistic, and socially-oriented world. Implicit in such maturity is the need for the integration of existing empirical data, derived from practical procedures, with solid theoretical substructures.

During the past decade, to continue the analogy, emphasis has necessarily been given to the developmental stages. However, two important environmental forces have accelerated the normal maturation process, namely, the second World War and the emergence of a contemporary system of scientific philosophy. In the course of the natural process of maturation, there has been the usual array of standardization studies—reliability, validity, group norms, differences between groups, and analyses of the effects of various factors or events upon performance. In addition, there has been, on the one hand, perceptible pressure from war needs for increased precision and objectivity, as reflected in the development of forms for group use, the expression of understandable and concrete behavior predictions, and the formulation of specific criteria of adjustment and personality variables. On the other hand, an atmosphere of concern with questions of philosophical rationale has led to simultaneous pressure for the development of a basic philosophy of projective psychology, as exemplified by studies directed toward a determination of the dynamics of the

*Read at the Annual Meeting of the Medical Society of St. Elizabeths Hospital, Washington, D.C., April 6, 1951.

actual process involved in particular projective methods, and by research making use of the projective methods as tools for investigating areas of personality theory.

At the present time, psychological research in the general field of projective technics seems to be flowing primarily in three channels: (1) experimental and statistical studies of individual test methods, frequently oriented to specific theoretical assumptions regarding the test itself; (2) development of improved prognostic criteria for groups, with emphasis on psychiatric and occupational samples; and (3) use of projective measures in connection with various forms of therapy, either as a method of evaluating changes, or directly, as a tool of the therapeutic process.

Illustrations of each of these three research foci may be drawn from a review of publications during the past year. Representative of the first category, that is, of experimental and statistical studies of individual tests, are a number of diverse approaches to a determination of the specific stimulus properties of various test materials. Examples of such studies include: verification of the recognized sexual characteristics of Cards VI and VII of the Rorschach; postulation of a theory by Piotrowski that characteristics ascribed to individuals in Thematic Apperception Test stories most different from the subject telling the story reflect the least conscious or least acceptable facets of his personality; and various types of approaches to content analysis of the Rorschach. Many other articles could, of course, be cited.

Most productivity during the year was centered in the second category, i. e., the development of group patterns; for example, over one-third of the reports published concerning the Rorschach test dealt with specific groups, broken down by age and by cultural, psychiatric, psychosomatic, professional, and industrial background. Of these, children and psychosomatic cases appeared most popular. Similar preoccupation may be found in work being carried out with the other kinds of projective tests.

Less frequent, but significant in number, were reports of pre- and post-therapy testing, with various types of therapies represented.

To turn to material close at hand, a glance at the theses recently completed by students in the Psychology Section of St. Elizabeths Hospital reflects, generally, the same three points of emphasis. An analysis of the relationships between varying degrees of stimulus ambiguity and varying degrees of personality integration confirmed a number of basic assumptions regarding the nature of the projective process. Several different comparative studies of various kinds of projective measures of organic and schizophrenic patients have revealed statistically significant patterns for each syndrome. Significant signs for the former group may be characterized as related to a loss in ability to integrate; patterns of the latter group reflect various aspects of dissociation, regression, and acute conflict. In the area of therapy evaluation, one example is a comprehensive comparison which has been made of pre- and post-electroshock mosaic constructions, with repeated tests of an equated control group. Evidence of a significant increase in organic signs after shock was obtained, as well as typical syndrome patterns and changes in test variables correlated with clinically observable behavioral changes.

To summarize the current status briefly, one could say that despite the marked progress which has been made in a number of areas, several important problems remain. The past few years have seen rapid strides in the development of standardization and normative data, in the proliferation of new technics, and in the formulation of isolated hypotheses

regarding personality dynamics. However, much of the clinical work now being done with projective methods is seriously handicapped by the lack of an integrated, comprehensive theoretical basis. As one step in the development of an adequate projective theory for the total process of personality, there is a need for more thorough integration of material from several tests, with more emphasis on projective batteries and an increased exploration and utilization of nonverbal technics.

One other important problem is a need to decrease the "cultural lag," which is apparent in the time discrepancy between the development of statistical and research methods and their conversion and application to clinical studies. A review of last year's literature on projective research reveals only a minimal use of recent statistical technics. For example, I found no citations on the use of recent modifications of small sample methods, sequential sampling, revised multiple correlation formulae, or inverse factor analysis.

Incipient trends apparent in current studies, reports, and events, suggest certain future areas of research in projective technics. Undoubtedly, the volume of prognostic group studies and the evaluation of the effects of diverse therapy methods will continue. The appearance of a few isolated studies of the same intellectual or personality variables, as measured by two or more different projective tests, may indicate a potential increase in the integrative application of test batteries and the verification of specific theoretical hypotheses. Expansion of such interdiscipline projects as that of the Yale studies on alcohol, and the trend in a few of the larger universities toward the selection of a limited number of relatively broad topics for the purpose of focusing graduate research, may well have important reverberations. It is hoped that these developments will serve, in part, to increase the use of available technical-statistical methods, and to coordinate group efforts, both intra- and inter-professional, on problems of greater scope and significance to the well-being of society.

To conclude this brief discussion of research on projective technics, I would like to borrow the words of an eminent statesman—"It is not the beginning of the end, but it is certainly the end of the beginning."

DISCUSSION

Leopold Bellak, M.D.

Dr. Vernier has presented the problems of research in projective technics so clearly and concisely and, even though briefly, so all-inclusively that it is no mere conventionality if I wish to congratulate her warmly.

Her presentation has made it impossible for me to add new material; all I can do is elaborate on a few points which she mentioned.

First, I would have ascribed paternity of projective technics not merely to psychiatry generally, but more specifically to Freud. It was he who first used the term "projection" in a psychiatric context (first in 1894, then again, in 1896), and, actually as early as his *Totem and Taboo*, enlarged this originally defensive mechanism into a *general theory of perception*—a fact little appreciated in the relevant literature.

I mention this point particularly since the term "projection" has been very indiscriminately used, and, applied as an adjective to tests, it has almost become a wastebasket term, nearly synonymous with "non-objective" (i.e., in distinction to intelligence and aptitude tests).

I believe that a clear definition of the concept of projection, and of what "projective" tests measure, belongs to the area of worthwhile research.

The defensive meaning of projection centered around the unconscious ascribing of subjective processes to external objects. Freud himself enlarged this to the concept that *all contemporary perception of stimuli is influenced by the mass of all previous perceptions;* I have elaborated this into a concept of "apperceptive distortion" (Abt and Bellak: Projective Psychology. Alfred Knopf, 1950).

In keeping with this theory, we present subjects with standard stimuli in projective tests and study the meaningfulness of the individual differences in the apperception of these stimuli, basing our diagnostic inferences upon these individual differences. By this definition, however, a large number of tests counted among projective tests, and many variables derived from nearly all tests, would fall outside the scope of this definition, as, for example, in tests such as the Bender-Gestalt and the Mosaic.

I propose, then, that projective methods really are concerned with more than perceptual problems and comprise the following five areas:

1. *Methods based upon the study of the perceptual contents.* Here we are concerned with *what* the subject says. The T. A. T. and MAPS tests are the best examples. To a certain extent, the Rorschach inquiry and Finger Paint method also belong in this category.

2. *Study of expressive, structural aspects.* The main inquiry is directed toward *how* the subject says or does something. Here we refer to technics such as the Mira, Mosaic, Rorschach, and graphology, which belong to the subsemantic levels of myoneural functioning insofar as these are valid procedures for the understanding of personality factors and structures.

3. *Gestalt functions, as exemplified in the Bender-Gestalt, the Mosaic, and the Rorschach (W, S, d, dd, etc.).* In the T. A. T., this function rarely plays an important part when the subject is unable to apperceive the picture as a whole and when he leaves the stimulus altogether.

4. *Body-image or self-image.* Figure drawing is primarily predicated upon this approach. It enters into the Roschach, for example, when the subject identifies with puppets, and in the T. A. T., especially when the subject sees the hero as crippled (3 BM), or the violin broken and/or "dead" (No. 1), or identifies with an athlete (13 BM).

5. *Methods of Preference.* Outstandingly, the Szondi is based upon a system of *selective choices* as personality indicators. Color choice in finger painting, selection of figures in doll-play, as well as in the MAPS test, all come into this category.

It is apparent that all five organismic aspects enter into every one of the projective methods, although they do so in varying degrees. One might keep these categories in mind for the selection of technics in each individual problem of diagnosis, either for the purpose of having a rounded battery, or for selecting the one test for a specific clinical need. Principally, one might use these five variables for a systematic inquiry into the test results of any one technic.

I hope that research into these areas enrich our theory, increase our efficiency, and, above all, increase the economy of the practice of projective testing.

Platybasia: Congenital Skull Malformation Simulating Degenerative Brain Disease*

James Peter Murphy, M.D.

GEORGE WASHINGTON UNIVERSITY, WASHINGTON, D. C.;
ATTENDING PHYSICIAN, ST. ELIZABETHS HOSPITAL, D. C.

Platybasia—literally, "flat base"—is a strange and interesting developmental anomaly of the skull, implicating the central nervous system, often with serious consequences. The condition consists of foreshortening and flattening of the basi-occiput, anomalous fusion of the upper cervical vertebrae, with resulting incarceration of compressed tonsils of the cerebellum (Arnold-Chiari malformation).

As Chamberlain has written, "it is as though the weight of the head has caused the ears to approach the shoulders, while the cervical spine, refusing to be shortened, has pushed the floor of the posterior fossa upward into the brain space.[1]" (Figure 1)

Virchow was first to describe the finding of platybasia at autopsy. Investigations by Arnold and Chiari resulted in understanding of the disabling features of the bony deformity which cripples because of constriction of the contents of the posterior fossa (cerebellum and medulla oblongata). The first roentgenographic clinical diagnosis of the disease was made by Schüller in 1905.

"Primary" platybasia is of embryologic origin; "secondary" platybasia may be seen in older people as a result of osteomalacia and is less likely to produce symptoms than the developmental type.

Embryologic failure is either simple malformation of the occipital bone and cervical spine or is produced by abnormal anchorage of the lower end of the spinal cord to the caudal sac. Signs and symptoms of platybasia may be manifest in early life or may not appear until much later. The spurt of skeletal growth at puberty may initiate decompensation of pressure relationships around the base of the brain in the latter instance.

Progressive incarceration of the cerebellum and brain stem can result in a great variety of neurological syndromes, ranging from unilateral paralysis of the tongue through simple hydrocephalus to weakness and incoordination of the legs. Certain complexes have been found to be common in this disease:[2] (1) severe occipital headaches, with numbness in the back of the head; (2) syringomyelia; (3) findings indistinguishable from those of multiple sclerosis; and (4) progressive spastic paralysis, with associated sensory loss of the posterior column type. That is, most prominent features of the abnormality may be manifestations of constriction of cervical or cranial nerves, blockage of ventricular fluid pathways, or pressure effects upon the cerebellum and stem.

The definitive diagnosis of platybasia is made by the x-ray film. If the tip of the odontoid process of C 2 vertebra in a lateral projection is above a line drawn from the hard palate to the dorsal lip of the foramen magnum ("Chamberlain's line"), the condition exists (Figure 2).

The following case was originally suspected to be one of multiple sclerosis. Roentgen-

*Presented at the Fourteenth Annual Meeting, Medical Society of St. Elizabeths Hospital, April 6, 1951.

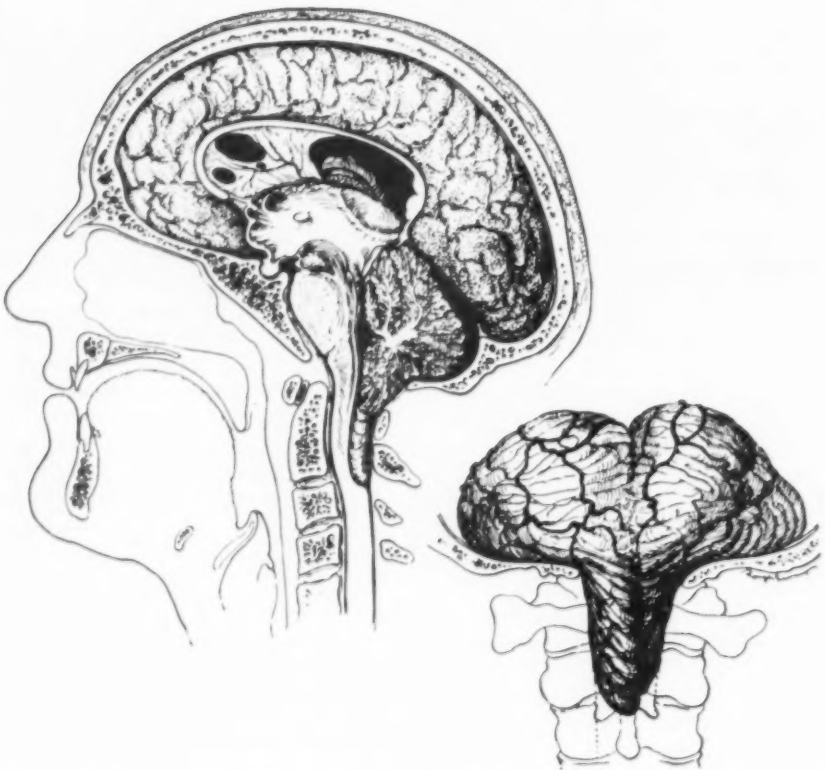


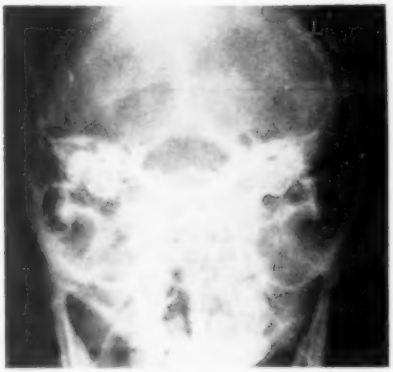
FIG. 1. Pathologic anatomy of platybasia with Arnold-Chiari malformation (from "Surgery of Spinal Cord" by Howard C. Naffziger and Edwin B. Boldrey, in *Surgical Treatment*, Bancroft and Pilcher, ed., "The Nervous System." Philadelphia, J. B. Lippincott Co., 1946.

ograms of the skull revealed the true state of affairs and led to successful surgery.

L. K. was a 24 year old white female nurse. Her chief complaints were those of unsteadiness of gait for the previous four years. She had begun to fall easily. Fronto-occipital head aches were experienced. Vision was blurred, and there was occasional ringing in the ears. Examination revealed wild nystagmus of gaze in all directions, absence of the abdominal reflexes, and a positive Romberg. Although the pattern fitted that of multiple sclerosis, the complaints of headache, an absence of bladder involvement, and the progressive nature of the illness seemed to justify spinal puncture and the taking of skull films.

Figure 2 is one of several x-rays in this case and disclosed platybasia. Figure 3 reveals the irregular formation of the foramen magnum.

On December 2, 1949, suboccipital craniectomy with upper cervical laminectomy was performed at George Washington University Hospital. The occipital bone was found to be



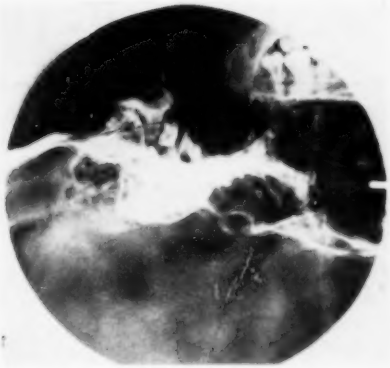


FIG. 2. Case L. K., lateral roentgenogram of skull. Tip of odontoid process (outlined) above line drawn from hard palate to foramen magnum ("Chamberlain's line").
FIG. 3. Anteroposterior roentgenogram, case L. K. Deformation and irregularity of foramen magnum, owing to congenital foreshortening of base of skull.

thick and short. The atlanto-occipital ligament was tough and calcified. There was deformity of the laminae of the first and second cervical vertebrae. Dura was incised from the inion down to C 3. Tongues of pink-brown tissue extending to the third lamina constituted the cerebellar hemispheres. Adhesions between dura and nervous parenchyma were broken up; cerebrospinal fluid began to come up into the field; and the compression seemed to have been relieved. The dura was left open for decompressive purposes and the wound closed.

At present, the patient is working full-time as an operating room nurse. There is no difficulty with gait. Headache, blurring of vision, and ringing in the ears have disappeared. She states that she feels as though she had "emerged from a fog." The Romberg sign is negative and reflexes are nearly normal, but lateral nystagmus persists.

Additional diagnostic aids to be used in suspect cases of this condition[2] are: (1) encephalography, in which the cisterna magna may be found to be obliterated, and (2) myelography, in which the downward projection of the cerebellar tonsils into the spinal canal may be visualized.

Reports of the successful surgical treatment of platybasia are increasing in neurosurgical literature. The case preceding is only one of many similar cases of patients rescued from the limbo of degenerative neurological disease. The application consists of offering individuals presumably suffering from hopeless involvement of the spinal cord and brain stem the benefit of x-ray and spinal contrast studies.

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ABSTRACTS

psychiatry

ADMINISTRATIVE PSYCHIATRY AND LEGAL ASPECTS OF PSYCHIATRY

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ALCOHOLISM AND DRUG ADDICTION

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BIOCHEMICAL, ENDOCRINOLOGIC AND METABOLIC ASPECTS

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CLINICAL PSYCHIATRY

Recent Trends in Psychiatry. SAMUEL FUTTERMAN, Los Angeles, Calif. Ann. West. Med. Surg. 5:465-68, May 1951.

In recent trends in individual psychotherapy, you find a more patient centered orientation with a tendency to fuse the polarities of the external world with object relationship and the basic biologic nature of man with early childhood conditions. Psychotherapy should be appropriate and flexible for the patient and his neurosis, and it should not make the therapist omnipotent at the expense of the patient. Treatment should alleviate some of the overwhelming restrictions from the super-ego. It must not only relieve symptoms but give a core of sufficient dynamic change within the personality to further development of that person's adaptive mechanisms.

There were many articles on the termination of psychoanalysis. *Essentially, for termination the presenting symptoms should always be kept in mind.* Other criteria should be the capacity for heterosexual genital satisfaction, the capacity to tolerate libidinal frustration and privation without regressive defenses and without anxiety, not only the capacity to work but some ability to endure unemployment, and the capacity for mourning.

The psychotherapy with schizophrenics has been encouraged by Rosen and Fromm-Reichmann. Rosen conceives of the schizophrenic as an infant again and associates the life and death meaning of the deprivations which he magically

replaces whether they be the breast, the stool, the genitals, or anything else. He feels that, with words, deeds, and instinctual feelings, the therapist can replace what the schizophrenic lacked in the growing-up process. Fromm-Reichmann starts with a more cautious interpretive approach establishing a good positive relationship and indicates by her interpretations what the psychotic symptoms are used for as a defensive attitude.

In group therapy we have seen more advance where the essential work is around the treatment of a number of individuals with a point of reference to discover the dynamic forces which the individual plays in that particular group. The group often is used to provoke and stimulate ideas and feelings which crystalize the awareness of the conflict which may be worked through in individual therapy.

In the drug therapies, we have seen the use of antabuse in the treatment of alcoholics, the use of ACTH in schizophrenics, and the use of an intravenous ether in nonconvulsive doses for the affective psychosis.

Topectomies seem to have their place for chronic schizophrenic patients with tortured self-concern and great deterioration. 24 references.—*Author's abstract.*

Depressive, Aggressive and Paranoid Reactions. BERNARD A. KAMM, Chicago, Ill. Psychoanalyt. Rev. *38*:127-38, April 1951.

More than 3,000 patients in an Army hospital showed a syndrome which was characterized by depressive or aggressive moods and paranoid thinking. The men expressed a variety of ideas, using the words: individual right, ideal, belief, standard, value, principle, duty, responsibility, morality, justice. These words had directed their thinking and acting in a useful way under so-called normal circumstances. In contradistinction a new reality had confronted patients with new and different tasks.

Two latent questions formed the basis of the patient's preoccupation: Did I do enough and did I get enough?

The depressed patients seemed to be motivated by self-accusations for having failed to fulfil their duties properly. They were inclined to depreciate themselves as being unworthy of respect and unworthy of continuing their careers.

In some cases chronic self-supervising ideas assumed the form of daydreams or phantasies about impending courtmartials.

The clinical aspect of analogous syndromes was different in those patients expressing considerable degrees of emphasis on having been deprived of what they believed to be their right. This resulted in a special type of depression, a grouchy, sulking, pouting one, with tears of helplessness and anger.

Many considered themselves as essentially better and entitled to more than the rest of the crowd. They rationalized such ideas by supposing to be endowed with special qualifications. They resented rules and regulations, did not take the rights of others into consideration, and acted in boisterous, defiant ways, trying to get away with as much as possible.

Between these two groups were individuals concerned both with doing their duties and with getting their rewards. They were preoccupied in their depressive

phase both with self-accusations and with feelings of loss or deprivations; in their paranoid phase both with being accused and with being deprived by others—and in their aggressive phase both with self-vindicating defense, with accusing others and with revengeful pleasure-seeking.

Concerning the outcome of these acute situational reactions, it can be reported they tapered off in two to three months after the patient's return to an environment which was familiar and not threatening their cherished ideas. These men were fairly well adjusted citizens who behaved in a reasonable way.

It is dangerous to touch taboos connected with firm beliefs. Superego contents and their origin may be recalled and understood as not valid any more, but the recognition of derived abstract ideas which have become a conscious or unconscious part of the ego and the practical application of such insight to reality testing remain restricted or impossible.

To become and to remain able to recognize such unconscious ties and their recurrent interference with rational thinking and acting requires interminable psychoanalytic vigilance. 3 references.—*Author's abstract.*

Differences in Prediction Based on Hearing versus Reading Verbatim Clinical Interviews. JOSEPH LUFT, Stanford, Calif. J. Consult. Psychol. *15*:115-19, April 1951.

The purpose of this study was to examine the relative effectiveness of listening to a clinical interview as compared to reading the same interview. By use of a prediction technic to measure judgment, it was found that readers and listeners did equally well in predicting responses to objective clinical test items. Identifying projective test responses, however, seemed to be easier for the listeners. Twenty-eight per cent of the student listeners were able to exceed chance scores while none of the student readers could do better than chance on the projective test. Exactly the same results were obtained, even though a second case interview was used and the groups of listeners and readers were reversed. When predictions were based on impressions gained only through reading the interviews, groups of psychiatrists, social workers, and clinical psychologists were superior to groups of undergraduate students on the projective test. However, students who listened to the interviews did consistently better in identifying projective responses than the clinical specialists who read the same cases. It is suggested that the voice in spontaneous speech tends to externalize significant underlying aspects of the personality which may not be apparent in the content of the speech. 17 references.

Self-Inflicted Pre-Frontal Lobotomy. GEORGE A. COLOM AND MORRIS H. LEVINE, Denver, Colo. J. Nerv. & Ment. Dis. *5*:430-36, May 1951.

This is a psychiatric study of a 37 year old woman who performed a self-inflicted pre-frontal lobotomy, in the course of an attempted suicide, while in a surgical menopause. The bullet passed through the sites ordinarily used in performing surgical leukotomy, and the ensuing symptoms and psychometric examinations simulated those reported by Freeman and Watts in their studies of depressed

patients treated with leukotomy. After the attempted suicide, she did not lose consciousness but immediately became disoriented, confused, and incoherent. During and following her hospitalization, her improvement was marked by a return of logical and coherent conversation and reality testing. There was an occasional return of urinary incontinence together with expression of suicidal thoughts, but with less intense feelings than expressed before; compulsive cleanliness, existing prior to the accident, disappeared almost completely. The personality change noted in this patient is similar to that in surgical lobotomies, but the return of depression and suicidal thoughts and the inappropriate affect are symptoms not encountered in successful surgical lobotomy. It is thought that although extensive brain damage occurred in this patient, an insufficient amount of white matter was destroyed to adequately combat the depression psychosis, which had persisted prior to the attempted suicide.—*Author's abstract.*

GERIATRICS

The Measurement of Intellectual Decline in the Senile Psychoses. JACK BOTWINICK AND JAMES E. BIRREN. J. Consult. Psychol. *15*:145-50, 1951.

The purpose of this study was to determine the validity of three indices in estimating intellectual decline in the senile psychoses. The three indices are: (1) the deterioration quotient, DQ, of the Wechsler-Bellevue scale, (2) the Babcock-Levy efficiency index, EI, and (3) the senescent decline formula, SDF, of Copple, based on the Wechsler-Bellevue scale.

In working with the elderly, valid indices of intellectual decline are useful in dealing with problems relating to occupation, retirement, recreation, and educative programs. For the hospitalized elderly, valid indices are helpful to answer questions relating to discharge or parole, diagnosis, and therapy.

The validity of the measures was determined by their ability to differentiate between a control population and a selected hospitalized population suffering from behavior difficulties, presumably due to later life organic brain changes. Subjects of both populations were white, aged 60 to 70 years, had English as their native language, and had a minimum of four years formal schooling. The selected hospitalized population was comprised of 31 individuals diagnosed as senile psychosis or psychosis with cerebral arteriosclerosis whose mean age on first admission to a mental hospital was 61 years, range 51 to 68 years. This group had been intellectually, socially, and emotionally adequate prior to onset of psychoses. The control population was comprised of 50 individuals selected by Fox and Birren in a previous study.

The results and conclusions were: (1) The DQ did not differentiate the two populations, indicating that it is an inadequate index of intellectual decline in the elderly. (2) The EI and SDF both significantly differentiated the two populations but were not significantly correlated, suggesting that these indices are measuring different aspects of intellectual decline. (3) The effectiveness of the EI was largely

due to a category of subtests called "initial learning," indicating the desirability of expanding such subtests in future refinement of deterioration indices. (4) There is a need to increase subtest reliabilities and to include more items of low difficulty for work with the elderly. (5) Evaluations of the elderly based upon subtest scatter of the Wechsler-Bellevue scale must be approached with extreme caution.—*Author's abstract.*

HEREDITY, EUGENICS AND CONSTITUTION

See Contents for Related Articles

INDUSTRIAL PSYCHIATRY

See Contents for Related Articles

PSYCHIATRY OF CHILDHOOD

Permanency of Glutamic Acid Treatment. F. T. ZIMMERMAN AND B. B. BURGEMEISTER, New York, N. Y. Arch. Neurol. & Psychiat. 65:291-98, March 1951.

Our previous publications were concerned with the effect of glutamic acid on mental functioning at various levels of the learning curve and over different intervals of time. Glutamic acid was found to be beneficial not only to patients in the category of low-defective intelligence but to persons at the high-defective and borderline levels of intelligence, who were within striking distance of average intelligence.

Our present paper is a report on our findings to date after glutamic acid has been discontinued from two and one-half to three years. Our results show a considerable degree of permanency after glutamic acid therapy has been discontinued over a period of years, with many patients holding their gains on intelligence tests remarkably well. Our data indicate that the amount of gain on verbal intelligence tests is of greater importance in determining permanency effect than is length of treatment. Performance test findings, on the other hand, favor length of treatment as a positive factor determining the degree of permanency.

Other investigators, who have studied the effect of glutamic acid on mental functioning, have not yet reported on permanency following cessation of treatment and are still conducting experiments along the lines of our previous work. Our present report includes a survey of the work on glutamic acid to date with critical comments. 17 references. 7 tables.—*Author's abstract.*

Mental Deficiency as a Basic Discipline in the Training of a Psychiatrist. ROBERT GIBSON, Dundee, Scotland. Am. J. Psychiat. *108*:42-43, July 1951.

Mental deficiency has firm connections not only with general medicine and genetics but also with education and sociology. Thus it offers on the one hand a close bond with the basic disciplines of medicine and on the other hand a wide contact with educational and public health spheres.

A mental defect is associated with at least 70 different conditions, ranging from subcultural defectives through the behavior disorders to the somatic types of more especial medical and pediatric interest, including an extensive series of syndromes affecting the skeletal, neuromuscular, special sense organ, and cutaneous systems, while the differential diagnosis requires consideration of pediatric, psychiatric, and educational conditions. Moreover, there is considerable scope for the study of genetic, biochemical, and environmental factors. On the psychometric side mental deficiency is an ideal branch in which to obtain a thorough basic instruction in the varied aspects of mental testing. Education, training, and, to an increasing extent, treatment are likewise functions of the modern mental deficiency institution and its ancillary clinics for the mentally handicapped. It is thus claimed that the mental deficiency institution and mental deficiency clinic together form a unit capable of providing the budding psychiatrist with a broad and secure basis on which to build.—*Author's abstract.*

PSYCHIATRY AND GENERAL MEDICINE

Psychological Factors in the Genesis and Management of Hypertension. EDWARD WEISS, Philadelphia, Pa. South. Med. & Surg. *113*:253-56, August 1951.

The organic tradition of medicine has been responsible for a narrow (physical) view of the etiology, pathogenesis, and treatment of essential hypertension. The psychosomatic approach does not neglect the physical problems involved but includes a consideration of the role of the emotions. It emphasizes the multiple factors in etiology and pathogenesis and attempts to evaluate the resulting composite clinical picture. Such studies indicate that the emotional component apparently is intimately related to the development of hypertension in some patients, to the production of symptoms in many others, and enters into the question of treatment in nearly all patients with this disorder.

Although all varieties of character and neurotic disturbances occur in hypertensive individuals, a common problem seems to be the presence of emotional tension due to chronic repressed hostility. This inhibited aggression (chronic rage) seems to bear a definite relationship to hypertension. If it can be turned outward by means of psychotherapy, anxiety is diminished and blood pressure is often lowered. Even if blood pressure is unaffected, the treatment often benefits

the patient by making him a healthier and more effective personality. Our objectives in treatment should be readjusted. We must do more than try to bring the blood pressure down. We must go beyond the physical aspects of hypertension to the personality of the hypertensive individual in order to be successful in the management of such patients. 6 references.—*Author's abstract.*

Menorrhagia-Psychosomatic Considerations, Report of a Case. SYLVAN A. STEINER, Washington, D. C. M. Ann. District of Columbia *20*:438-52, September 1951.

A case of menorrhagia which was refractory to medical and surgical therapy but did respond to psychotherapy is reported. The dynamics of this patient's hostility to her alcoholic husband is revealed.

When the patient was a year old, her mother died. She was raised by a stepmother who favored her own daughters. She disliked her intensely and so never identified herself with a woman in the role of a housewife and mother. She loved her father who was refined, generous, and devoted to her. Thus she remained an emotionally dependent person.

In her marriage she unconsciously expected to establish the same relationship with her husband as with her father. The husband's dynamics were in effect like hers. He looked to her for the dependency-need a son gets from the perfect mother. When his wife failed to provide mothering for him, he turned to the bottle for comfort. He became an alcoholic. Alcohol also enabled him to verbalize his hostility against his wife.

After two years of marriage the patient became increasingly frigid. Four years later she developed the menorrhagia which served to prevent intercourse entirely. Thus the frigidity and present illness were expressions of hostility toward the husband's failure to be a good father-image.

During an explanation of her dynamics the patient developed a dramatic hysterical reaction. Following this she readily accepted the insight. She also gained clear understanding of her husband's behavior. Thereafter, she gradually became immune to his hostile reactions. She tried to be a better wife but he drank even more, refused therapy, and finally she divorced him. At present she is working and supporting her children. There has been no recurrence of the menorrhagia for one year.

The paper stresses the emotional requisites necessary for a successful marriage and the need for physicians to educate their patients for marriage.—*Author's abstract.*

Notes on a Symposium: the Internist as a Psychiatrist. STEWART WOLF, New York, N. Y. Ann. Int. Med. *34*:212-16, January 1951.

Fifty years ago the qualifications of an internist depended heavily on his knowledge of pathology. Since then, there has been leading emphasis on physiology and later, bacteriology. These three are no less important than they ever have been in the education of a competent internist, but it is becoming increasingly clear that

since psychologic phenomena are a part of the problem of every patient for whom he cares and are of leading importance in 40 to 60 per cent of his patients, the internist also needs understanding and skill in the technics of psychiatry.

This paper reviews briefly the methods of investigation and treatment which are available to the internist and outlines certain important qualifications. It concludes that the well trained internist who has some background in psychiatry can offer satisfactory and definitive treatment to patients with so-called psychosomatic disorders. As one does not need to be a biochemist to treat a patient with insulin or curare and one does not need to be a bacteriologist to prescribe diphtheria toxoid or aureomycin, so one does not need to be a psychiatrist to give definitive psychotherapy. 4 references.—*Author's abstract.*

PSYCHIATRIC NURSING, SOCIAL WORK AND MENTAL HYGIENE

The Role of the Psychiatric Nurse in the Newer Therapies. A. E. BENNETT AND JUNE T. EATON, Berkeley, Calif. Am. J. Psychiat. *108*:167-70, September 1951.

The failure of many psychiatrists to use fully the abilities of qualified psychiatric nurses is deplorable because of the scarcity of all competent psychiatric personnel and the many demands upon their time. Good psychiatric nursing depends on clear understanding of the nurse's specific duties and responsibilities.

With advice from the psychiatric staff, the chief psychiatric nurse should have full authority to develop all rules and regulations in her department; through frequent conferences she should of course cooperate with other groups in the hospital. Her major duty is training an auxiliary staff to conform to modern standards. Good psychiatric nursing means close work with the psychiatrist in the special physical and chemical therapies and handling of the patient's anxiety and tensions in psychosomatic and other functional complaints. A good theoretic background plus practical training in mental wards prepares the nurse for these functions.

In insulin treatment, the nurse needs the same full instructions as do residents. Her close observation and accurate charting are important, while her alertness in picking up clues is valuable in planning therapy. In electroshock therapy, she needs precise instructions in technics and all phases of treatment. She is valuable in gaining the patient's cooperation and allaying his anxiety. Her daily observations aid the psychiatrist to decide the frequency and spacing of treatments. In lobotomy the well trained nurse watches the postoperative patient closely; she knows the best means whereby to retrain the patient's toilet and eating habits and aid in his rehabilitation.

There is considerable controversy concerning the nurse's role in psychotherapy. Since all nurses, by contact with patients, actually do some kind of psychotherapy, the psychiatrist should use it purposefully, explicitly delegating his responsibility insofar as possible. With full knowledge of the patient's history, she can learn how

to permit him to express his feelings and immediate difficulties. Under supervision she can assume such responsibilities as simple explanation, reassurance, encouragement, and suggestion. Nurses may also participate in group psychotherapy, and certain nurses can be trained to take excellent psychiatric histories. This function aids the nurse to establish rapport with the patient and enables her from the start to use psychotherapy more effectively. Setting up an occasional research program increases the nurse's interest and efficiency. Assuming these greater professional duties means releasing the nurse from much bedside detail—duties which auxiliary personnel can carry out.

The psychiatrist's interest, cooperative attitude, and explanations enable the psychiatric nurse to attain the objectives described. 13 references.—*Author's abstract.*

Combined Operations. LESLIE A. OSBORN, Madison, Wis. Wisconsin M. J. *50*: 365-66, 375-76, April 1951.

The health approach is the most significant development of modern medicine. Through its application some illnesses once widely prevalent have been virtually eliminated, and life expectancy has been greatly prolonged.

The health approach which has been so successful in general medicine is equally applicable to the problems confronting psychiatry. By placing emphasis on mental hygiene, we are taking important steps toward prevention of emotional illness in its many forms.

The conquest of diseases, such as typhoid fever and diphtheria, has come about principally through preventive measures and health protection. If these illnesses occur, they still are serious and difficult to treat, but we do not let them occur. The knowledge which makes prevention possible has come from intensive care of the sick and establishment of the whole course of development. Going back to sources, the dangers which have involved the patient are found in the community constituting a risk to others. Thus, knowledge gained from care of the sick is the chief source of knowledge which makes the health approach possible.

These principles from the field of general medicine are applicable to mental hygiene and psychiatry. The illness approach in the past kept us concentrating on those who were in psychiatric hospitals. Now we are learning the sequence by which emotional illness insidiously develops and later shows up in far advanced form. This knowledge has come belatedly, because we knew little about treatment, but did not work intensively with the patients in doing the best we could and in pressing research with full vigor. As more intensive efforts on behalf of the sick are being made, the new knowledge needed is rapidly appearing. This is making possible the earlier detection which means a better prognosis and readier treatment, and it is also revealing many lesser forms of emotional illness which can be readily treated. Gradually we are learning more about mental hygiene—the developmental need which makes possible healthy personality growth of children, the interpersonal relationships which play so important a role in emotional health, and the sociological influences which contribute to the difficulties in individual lives.

The field of medicine is changed by the very advances which develop within it. As diseases are successfully prevented, the remaining distribution of health problems is altered. As life expectancy increases, there are more old people who with the health needs characteristic of the later years accentuate it. As acute infections have been reduced, the proportion of slower, subacutent chronic diseases increases. The illnesses which arise from the difficulties of personality development, interpersonal relationship within the family and community and in the complex culture of modern civilization stand out as urgent challenges to the medical profession. The health approach and the teamwork which have been so conspicuously successful in bringing about advances of the last half century give promise of similar success if applied in this more personal field of medicine. Knowledge of aggression as it develops in the life of an individual through frustration may find application to the widespread aggressions that sometimes flare up into disastrous pandemics of war.

Television—Psychiatric Aspects. PHILIP SOLOMON, Beverly Hills, Calif. Ann. West. Med. & Surg. 5:483-86, May 1951.

The real problem of television is to use it and not abuse it. This requires planning, forethought, and consideration for the rights and desires of each member of the family, including the children. Since programs are published on Sunday for the entire ensuing week, a schedule can be drawn up in advance that will be sane and yet reasonably satisfying to the various members of the family. Of course, this involves compromises but, when compromises are made through obvious efforts at democratic fairness, children are usually found to be surprisingly cooperative. An attempt should be made to determine for each child how much television is good for him. Trial and error will help. If a particular program seems to be frightening or overexciting to a child, it can be suggested that he give it up for a while and substitute something else. If the surmise was right, he will probably be inwardly glad to follow the suggestion.

Those who still do not own television sets can hardly be blamed for resisting capitulation as long as possible. By all means let them see how long they can hold out. When they do give in, they should do it as gracefully as possible, and as sensibly. Television should be built into the home not only physically but emotionally. Like vitamins along with a good diet, television can supplement but can never supplant healthy active living in the home.

PSYCHOANALYSIS

The Obstacle Motif as a Typical Dream Experience. H. S. BARAHAL, West Brentwood, N. Y. Psychiatric Quart. 25:38-54, January 1951.

Psychoanalytic literature records certain types of typical dream experiences which are universal in character, such as dreams of falling from high places, loss of teeth, flying, embarrassment at being naked or scantily clad, failing in examina-

tions, missing trains, death of beloved persons, and emerging with great difficulty from a large chamber containing water (birth fantasy). The author presents an additional dream experience consisting of being enroute toward a certain goal and then being confronted by an obstacle. The mode of locomotion can be by train, plane, elevator, automobile, walking or other means of propulsion. The obstacle may be a difficult road, a mountain, an insurmountable passage or similar obstruction. The dreamer may utilize various methods of handling the obstacle; he may run away from it, wake up in fright or he may negotiate it with difficulty or relative ease. The type of obstacle and the manner in which the dreamer handles it is of great significance in determining his problems and is of great help in psychoanalytic therapy in showing the progress of the therapy. 2 references.—*Author's abstract.*

Nightmares of Cannibalism. SANDOR FODOR, Lancaster, Pa. Am. J. Psychiat. 5:226-35, April 1951.

Fire has been intimately associated with feeding ever since primitive man discovered that cooking or roasting enriched the flavor of food. The discovery may have given impetus to cannibalistic practices. Not only was the victor invested with the strength and virtue of the vanquished enemy by incorporating him in himself (a belief which still prevails amongst cannibals), but he derived increased pleasure from eating his foe.

According to Freud the only criminal instinct we have lived down in the last few thousand years is cannibalism. We no longer eat each other. Legislation to forbid cannibalism or prescribe punishment for it is superfluous. He who is guilty of such practice is confined to an insane asylum. Nothing could indicate more emphatically the complete rejection of cannibalism by modern society.

Yet, as long as we destroy life by eating, we must expect retaliation in nature. Animals do not willingly sacrifice themselves on the altar of our superior morality. In self-defence and in obeying the call of hunger or the instinct of destruction, they may turn on us and eat us. Hence the fear of being eaten is not an archaic remnant of the human mind. Whether it is engendered by fairy tales, true stories or by dangers actually encountered in civilized or savage lands, in childhood or in adult age, this fear is an essential protective mechanism with which we will not be able to do away for the next few thousand years.

If we approach the problem from a purely psychologic angle, the hope of eradicating cannibalism from our fantasy life is a faint glimmer at the best. For weighty reasons it could hardly be otherwise. In the prenatal state a child epitomizes the physical evolution of man from the life spark stirring in the mud of the primeval ocean to the human stage. After birth, under the pressure of parental and social discipline, the child re-enacts the moral evolution of mankind. At birth, the child is a savage and is comparable to a cannibal. It tests reality by the mouth and destroys that which it assimilates. The behavior is instinctual, but in the child's dependent state it is fraught with far-reaching consequences. Family disapproval of the child's behavior is bound to arise. Frightened or made conscious of guilt, the child expects destruction through being devoured by the powerful parents. The

ogres of fairy tale are not the products of fancy. They are objectifications of the panic of the child.

We have forgotten how we felt when we were very young and attribute but little importance to the infant's abject dread of oral destruction. Foolishly, we often nurse the very fear when, out of sheer love, we pretend to eat a little child's arm or foot. All is well as long as we do it in love; but let the parent grow angry and the harmless play is remembered grimly, the scolding mouth becomes a cavern full of gleaming fangs threatening with a horrible death.

The fear is not quite fanciful. The panic of the child is based on an organismic memory. In pain and terror we were disgorged from a place of warmth and security when we were born. To be eaten or to be swallowed is a reversal of this process. Parental anger mobilizes the trauma of birth. The result is fear beyond control in the waking state and nightmares of terrifying intensity while we are asleep. In illustration, the author discusses in detail a number of clinical cases.

Neurotic Helplessness in the "Masochistic Situation in Reverse." EDMUND BERGLER, New York, N. Y. Psychiatric Quart. 25:118-23, July 1951.

There are neurotics who spend their emotional life in constant unconscious repetitions of the banal masochistic fantasy "bad mother mistreats me." Having unconsciously concocted the framework of mistreatment, i.e., by choosing a shrew, or leechlike wife of the reproachful type, they rebel constantly in futile pseudo-aggression. That rebellion is, however, but the inner alibi for the deeper repressed masochistic enjoyment. Consciously, of course, these marital martyrs consider themselves innocent victims of an unhappy marriage.

There is, however, one form of these relationships, so far not stressed: the masochistic situation in reverse. The term is suggested for a neurotic set up in which the husband—in pursuit of his pseudo-aggressive rebellion—is confronted with his wife's martyred facial expression, a hopeless movement of a hand, the "tearful eyes of a beaten puppy." This mute technic immediately renders the husband helpless: he gives in, and the violent scene ends with his apology and defeat.

The reason for this paradoxical reaction is explainable: the marriage of these men is based on an unconscious repetition of the unconscious fantasy—"bad mother mistreats me, the innocent victim." In situations in which the husband fights with his wife, the latter reacting with the described facial expression of the victimized martyr, the roles are reversed. Now, the husband seemingly acts out unconsciously the part of the "cruel mother," which results in his wife's taking the role (previously assumed by the husband) of the victimized child. This is more than this neurotic can take, since his inner conscience immediately attacks him, "What right have you to act the identical cruelty against which you objected when mother administered it?" Thus, to "keep in the act," the original situation is restored: the husband gives in.

The irony of the situation lies in the fact that the husband accuses himself of exaggerated cruelty towards his poor wife. Thus, the whole guilt, pertaining in inner reality to repressed masochistic solution of his infantile conflict, is shifted to

the pseudo-aggressive defense. The mechanism has extensive practical importance. Without the psychiatrist's knowledge of the masochistic situation in reverse, some of these marital conflicts cannot be solved in therapy.—*Author's abstract.*

PSYCHOLOGIC METHODS

Differences between Neurotics and Schizophrenics on the Wechsler-Bellevue Scale. LAWRENCE S. ROGERS, Denver, Colo. J. Consult. Psychol. *15*:151-53, April 1951.

Fifteen patterns of subtest scores were found in the literature which are supposed to be characteristic of schizophrenics or neurotics. It was the purpose of this study to investigate whether these indices differentiated between neurotics and schizophrenics. The subjects consisted of 183 male World War II veterans. Of these, 100 were diagnosed as neurotic and had received treatment in a Veterans' Administration mental hygiene clinic or hospital. The two groups were comparable both in age and intelligence quotient, in central tendency as well as variability.

The results are presented in tabular forms. They may be summarized by stating that schizophrenics when compared with neurotics gave the following differences:

1. Significant at the 1 per cent level of confidence: comprehension score below vocabulary; picture completion score equal to or below vocabulary; picture arrangement score below vocabulary.

2. Significant at the 2 per cent level of confidence: arithmetic score 2 or more points below vocabulary; sum of picture arrangement plus comprehension less than information and block design.

3. Significant at the 5 per cent level of confidence: similarities score 3 or more points below vocabulary; block design 2 or more points than picture completion; object assembly equal to or above block design.

4. Not significant: digit span score greater than arithmetic; digit span score greater than vocabulary; digit symbol score below vocabulary; picture completion plus block design lower than sum of picture arrangement and object assembly; sum of information plus comprehension plus block design divided by sum of digit symbol plus object assembly plus similarities greater than unity.

5. Not found often enough to be treated statistically: very low similarities with high vocabulary and information; drops in the weighted scores of 6 or more below the mean weighted score. 6 references. 1 table.—*Author's abstract.*

Psychological Test Reporting: An Experiment in Communication. HELEN D. SARGENT, Topeka, Kan. Bull. Menninger Clin. *15*:175-86, September 1951.

The purpose of the paper is to stimulate discussion of one of the most important interprofessional problems in psychology and psychiatry: communication between the psychologist who examines a patient and other members of the psychiatric team who treat him. The psychologic test report is the main, though not the only purveyor of information to others and hence deserves careful consideration. For

the purpose of examining some of the issues in regard to what constitutes a useful report, an informal experiment in report writing was undertaken by the author. In order to control the variables of interpretive bias, test utilized, and patient characteristics (which ordinarily make for differences in test reports rendering them difficult to compare), the test findings for 1 patient on the basis of one projective test (the Sargent Insight Test) were analyzed by a single psychologist who varied the technic of reporting by writing four reports differing according to purpose and method of presentation. These four reports are presented in the article as a basis for discussion and comparison. The first report is nontechnical and seeks to understand the problem as the patient sees it. The second is written in theoretical abstractions and is diagnostic in purpose. The third seeks to conform to principles of research reporting and the fourth attempts a description of the part and integrative processes making up "total personality."—*Author's abstract.*

The Accuracy of Self-Evaluations: Its Measurement and Some of Its Personological Correlates. ROBERT R. HOLT, Topeka, Kan. J. Consult. Psychol. *15*:95-101, April 1951.

The article contains a discussion of problems in defining insight and in measuring it statistically. The accuracy with which 10 college students rated themselves on 35 needs (here called insight) was found to be related to measures of intelligence, active adventurous living in the world of reality, friendly dominance, and social adjustment, and (possibly) constitutional strength. Other topics taken up are: the relationship between insight and projection in this group, the relative accuracy with which different needs were self-rated, and other sources of error in the ratings that were used.—6 references.—*Author's abstract.*

A Comparison of the Rorschach and Behn-Rorschach Inkblot Tests. ROBERT M. EICHLER, New York, N. Y. J. Consult. Psychol. *15*:185-89, June 1951.

The present investigation was designed to determine the extent of correspondence of Behn and Rorschach test results. Three groups, each consisting of 35 white male subjects, were tested and retested under three different conditions. The first group received the Behn, followed, after a median time interval of 20 days, by the Rorschach. The second received the tests in reverse order (Rorschach followed by Behn) with a median time interval of 21 days. As a control, subjects in the third group received the Rorschach, followed, after 21 days, by another Rorschach.

Reliability coefficients involving the Behn, while approximating to a considerable degree Rorschach test-retest results for many of the scoring categories, were generally too low for satisfactory use in the individual case. Several of the categories, however, obtained coefficients duplicating Rorschach test-retest reliabilities. Comparison of mean scores on the two tests revealed consistent differences attributable to test series for some response categories.

In general, the results of the study indicated the Behn to be a quite similar but in no sense a parallel test to the Rorschach. Possible important uses of the Behn

were discussed. In addition, reference was made to implications of the incidental findings on Rorschach test-retest results. 12 references. 2 tables.

A Scale of Neuroticism: An Adaptation of the Minnesota Multiphasic Personality Inventory. JOHN F. WINNE. J. Clin. Psychol. *7*:117-22, April 1951.

The purpose of this adaptation of the MMPI was to develop a short scale useful for identifying all types of neurotics. Such a scale might be of value to industry or to hospitals and clinics and could also form the basis for a study of personality organization of normals and neurotics.

The test records of 560 male white veterans, equally divided between normal and neurotic, were examined by statistical technics to determine those items which would significantly distinguish between the groups. Thirty-three such items were found, of which 30 have been combined into a scale of neuroticism. The biserial correlation between class membership and number of deviant responses is .554 for the validation group (140 normals, 140 neurotics) and .530 for the similarly composed cross validation group. The split-half reliability of the scale is .728 (corrected to .843) for all normals and .757 (corrected to .862) for all neurotics.

With a cut-off point at 11 or more deviant responses, about two thirds of a known group were identified correctly. The scale is less effective for identifying neurotics with physiogenic and conversion symptoms or with mild and transient anxiety than it is for more severe anxiety cases. Normals with severe physical disorders, low intelligence, deafness, or possible psychosomatic complaints (ulcers, asthma, etc.) tend to score high on this scale. It is suggested that a more intensive examination be made of borderline cases in order to reduce errors of identification.—*Author's abstract.*

An Interpretive Aid for the Sc Scale of the MMPI. STANLEY J. BENARICK, GEORGE M. GUTHRIE, AND WILLIAM U. SNYDER, Washington, D. C. J. Consult. Psychol. *15*:142-44, April 1951.

In working with the MMPI, clinicians frequently have found profiles of nonpsychotics which showed abnormally elevated Sc. (schizophrenia) scores similar to those characteristic of schizophrenic patients. Even with a knowledge of the schizophrenic pattern, there still remain a number of profiles from nonpsychotic patients which are not readily distinguished from the profiles of psychotic patients. The purpose of this study was to find a method which would differentiate these patients.

An analysis of the Sc. items answered by 30 psychotics and 30 nonpsychotics yielded 11 items answered significantly more frequently in the schizophrenic direction by the psychotics and 10 items by the nonpsychotics.

Using the 11 items as a scale, the 60 profiles from this group were scored. Each

item answered in the significant direction was given a score of plus one. Maximum efficiency of separation was achieved by using a cutting score of 2.5, that is, those patients scoring 3 or more were called psychotic. Although this same cutting score used on a cross-validation group of 40 patients showed improvement over chance significant beyond the 1 per cent level, inspection indicated that such a cutting score might be a little low. A score of 4 or more, however, would enable one to speak with much confidence.

In comparing the discriminative effectiveness of the F score with that of the 11 items presented in this study, the findings indicated that the F score deviated in the expected direction but it did not separate the groups as effectively as the 11 items.

In using these 11 items as an interpretive aid it must be borne in mind that they were derived and cross-validated on profiles having a Sc. score above 20, and that the profiles showed neither a distinctly psychotic nor distinctly neurotic profile pattern. 7 references. 3 tables.—*Author's abstract.*

A Survey of Szondi Research. WILSON H. GUERTIN AND HERBERT G. MC MAHAN, Westville, Ind. Am. J. Psychiat. *108*:180-84, September 1951.

This survey was designed to familiarize the reader with the nature of Szondi research which had been conducted so that he could make some preliminary evaluation of the value of this technic.

Considerable work has been done on the nature of the Szondi stimulus pictures, probably because of the recognition of the principle that a test can be no better than its items. The value of the stimulus pictures in evoking personal reactions seems established according to the studies reviewed, yet, it has not been demonstrated that Szondi's particular sample of pictures are superior to others which might be utilized.

Szondi's theoretic framework, as modified by Deri, has received some research attention because of its uniqueness and clarity of presentation. All the studies reviewed suggested that picture preferences could not be adequately explained through the operation of the eight need-systems. One of the most crucial studies reviewed is a factor analysis which should have revealed factors which were coincident with Szondi's need-systems. However, it was found that, "The factor constitutions of pictures of the same diagnostic category are no more similar than those of pictures from different categories." There was no support for Szondi's idea of viewing pictures as so-called "pure" items.

Evaluation of the technical design of administration has been concentrated largely on an analysis of the Szondi test from the point of view of its being a forced-choice technic. Szondi's assignment of pictures to the various sets seems to have conformed to the principles of forced-choice technic. To some extent some regrouping might be beneficial.

Need-systems and empirical variables have received considerable attention since they are more direct although rather narrow validation approaches. In general, quite poor correspondence between behavioral variables and need-systems was

revealed by the various studies. Rather conspicuous by its absence was the lack of an adequate Szondi validation attempt.

Studies reviewed were presented briefly, and the survey cannot be regarded as highly critical. While this survey was designed to fill the immediate need of presenting the survey, further reviews and experimental reports will undoubtedly throw more light on the possible values and deficiencies in the Szondi technic for evaluating personality. 19 references.—*Author's abstract.*

The Ambiguity Values of TAT Cards. SIDNEY W. BIJOU AND DOUGLAS T. KENNY, Seattle, Wash. J. Consult. Psychol. *15*:203-09, June 1951.

This study was designed to investigate further the assumption of a direct relationship between the ambiguity qualities of picture stimuli and the extent of personality factors revealed in the elicited fantasy. While the present article is confined to an exposition of the problem of establishing ambiguity values for TAT pictures, subsequent reports will describe the construction, reliability and use of the fantasy scales, and the findings on the relationship between stimulus ambiguity and variations in fantasy scale value.

Ambiguity was defined in terms of psychologic rather than physical properties. Fifty-one judges ranked 21 TAT cards (the general and male series) on the basis of their ambiguity, which was defined in terms of the estimated number of possible interpretations a picture evoked. A picture stimulating many interpretations was judged as vague or low in structure, while one eliciting one or few interpretations was judged to be definite or high in structure. The final ambiguity value of a card was expressed in terms of its median rank order value.

Statistical analyses of result revealed: (1) The multi-judge reliability of the ranking seems to be satisfactory ($p = .80$). (2) The rank order differences between the male and female judges were not reliably different.

The present findings on ambiguity were compared with Murray's division of the cards into two series of 10 each. Judged by our definition of ambiguity, Murray's belief that cards number 10 and below are more structured than those numbered 11 and above is called into doubt.

On the basis of our present results, 15 cards varying in ambiguity value were selected for the subsequent study on the relationship between stimulus ambiguity and extent of personality revealed in the fantasy produced.—*Author's abstract.*

On Recent Usage of the Einstellung-Effect as a Test of Rigidity. A. S. LUCHINS. J. Consult. Psychol. *15*:89-94, 1951.

In a wide range of subjects given a series of problems all solvable by one method, the overwhelming majority became mechanized, that is, they were blinded to a simpler possible solution in a series of similar-appearing problems that followed. Some types of subjects showed more recovery from this "Einstellung" than did others. It was possible to vary experimental conditions so that anywhere from 0 per cent to 100 per cent of the subjects showed the blinding effects and so that

100 per cent recovery from mechanized behavior was procured where formerly less had been shown.

Dr. Luchins criticizes the use of the Einstellung problems as a measure of an allegedly general clinical phenomenon called rigidity. Investigators have not always used comparable procedures in administering the Einstellung problems nor have they by any means statistically demonstrated a pervasive characteristic of rigidity.

The overtly similar Einstellung responses of different individuals, far from being the result of any one entity like rigidity, may result from processes as unrelated as intelligent generalization on the one hand and unintelligent blindness on the other. Moreover, we must not assume that some stable disposition (such as variability) inhering in the individual and acting independently of field conditions accounts for rigidity of behavior generally or for Einstellung behavior in particular. There are grave difficulties in the measurement of presumed personality characteristics such as variability and concrete-mindedness. Moreover, experimentation finds cases where these are either unrelated to Einstellung performance or related in a manner opposite to that required by the theory in question.

Dr. Luchins proposes for the present to continue research by varying experimental (field) conditions to see what differences in mechanized behavior are made. Present animal experimentation of this type at McGill University is described.—*Author's abstract.*

PSYCHOPATHOLOGY

A Study of Judgment in the Psychopathic Personality. B. SIMON, J. D. HOLZBERG, AND J. UNGER, Middletown, Conn. Psychiatric Quart. 25:131-50.

Cleckley has postulated that a real and determinable psychosis is operative in the fully developed psychopathic personality. He believes that the psychopathic personality shows no change in his reasoning processes and that it is this absence of change which serves as a "mask of sanity." He can learn to use the language of other men, but this language has a different significance for him. It is for this reason that Cleckley applies the term "semantic dementia" to these individuals. Essential to this concept is the defect of judgment which characterizes the behavior of the psychopath, i.e., while he may intellectually recognize the destructiveness of his own behavior, he is, nevertheless, incapable of utilizing good judgment and exercising control over his own destructive impulses.

The present study is based on the hypothesis that the psychopathic personality is capable of learning social values which, however, are not effective in influencing his judgments when they conflict with his needs for immediate gratification of impulses. It is the purpose of this study to test this hypothesis.

The experimental group consisted of 22 girls from a delinquent institution who had been diagnosed by a psychiatrist as psychopathic personalities. The controls

were a group of student nurses who were comparable to the experimental group in age and in intelligence. The experimental variable was the psychiatric diagnosis of psychopathic personality for the subjects in the psychopathic group.

A list of 40 items of the completion type was devised, i.e., the subject completes each item in any manner he wishes. An example of one such item was: "Lorraine realized that her friends were bad company, but . . ." The items were constructed with reference to the hypothesis that in a situation in which learned social values and personal needs conflict, the psychopath will not be influenced by his learned values, since these are only incorporated superficially in the personality structure.

Using the same identical situations as appeared in the completion test, a 40-item multiple choice test was constructed. Each item contained two choices, one of which was considered to be deviant—socially undesirable or a poor judgment. Thus, for the example of the item given above, the two choices were: (1) She had not known this when she met them; (2) she had good times with them. The latter choice for this item was considered the deviant response.

The completion and multiple choice items were administered to both groups with a one week period intervening. The completion items were administered first to avoid the possible influence which might obtain if the choices on the multiple choice test were seen first.

Of the 40 items on the multiple choice test, only two were found to differentiate significantly between the two groups. More items were answered in a deviant direction by normals than by psychopaths, although the differences between the two groups for most of the items were not significant. On the multiple choice test, nine items were found to differentiate the two groups statistically.

Thus, the sentence completion test was found to be more sensitive to differences in judgmental evaluations between normals and psychopaths than was the multiple choice test. This differential capacity of these two instruments would imply that the psychopath has learned social values and is able to recognize them where they are presented overtly (multiple choice test). When a psychopath is thrown upon her own resources in resolving a conflictual situation (completion test), these learned values are not readily available as guides, apparently because of their superficial incorporation into the personality structure. The psychopathic girl attempts to outdo the normal in "normality" in that she selects fewer deviant responses on the multiple choice test than does the normal herself. However, she does not do so where she has no external clues. In the latter situations, clear-cut differences in judgment between the normal and psychopath become apparent. Cleckley's hypothesis would then seem to have been substantiated to the extent that there are measurable differences between the judgment of psychopaths and normals.

Examination of the significant items of the completion test permits the following description of the female psychopath:

She possesses low tolerance for frustration and is irritated easily. She is fearful and unstable emotionally. She tends to adopt paranoid ideation as a defense against a seemingly hostile world. She is punishing and lacking in empathy for others. She prefers physically dangerous sports and craves excitement. Love relationships are superficial and disrupted easily. She is irresponsible and lacking,

particularly, in a sense of responsibility toward parent figures. Home ties are shallow. She has anxiety about exposing her body to others. 7 references. 5 tables.—*Author's abstract.*

Pity as Unconscious Disguise of Terror-Like Fear. EDMUND BERGLER, New York, N. Y. Quart. Rev. Psych. & Neurol. 6:241-45, October 1951.

A specific type of pity is described, based on unconscious masochistic identification as the first step; the second step consists of denying, intrapsychically, this identification by the mechanism of "out-distancing." The latter defense, constituting the unconscious excuse, runs something like this: "I am different; I have only pity for so much suffering." People who use this defense are severe psychic masochists themselves; every exaggerated self-damage observed in the other fellow provokes an ironic reproach of the inner conscience, pointing to the inner similarity. To disprove this reproach, pity is felt and "conscience money" of a specific type paid; it is, so to speak, "out-distancing" money. The thesis is demonstrated on clinical and literary examples (Richard Savage, as described in Samuel Johnson's sketch on Savage). 6 references.—*Author's abstract.*

TREATMENT

general psychiatric therapy

See Contents for Related Articles

For Reference Only

Schizophrenia and Hormones: Some Present Trends: Their Implications and Backgrounds. WILLIAM MALAMUD, Boston, Mass. New England J. Med. 244:908-14, June 14, 1951.

drug therapies

Differential Psychotherapy of Borderline States. V. W. EISENSTEIN, New York, N. Y. Psychiatric Quart. 25:379-401, July 1951.

Certain patients who appear neurotic cannot be treated by the established and classical method of psychoanalysis, according to several recent authorities. These are the pseudo-neurotic forms of schizophrenia, or borderline cases, who, nowadays, constitute almost one third of those seeking private psychiatric care. While such patients appear normal, superficially, in many aspects of their behavior, they may be readily precipitated into psychotic breakdowns through the release of feelings involved in the usual process of "uncovering" therapy.

The author presents a plan of treatment aimed at reducing the risk in the inten-

sive psychotherapy of such cases. He advocated a frankly supportive and active approach to bolstering the weak ego structure of these patients, advises against the use of the couch in the treatment of such disorders, and recommends spontaneous discussion of the patient's problems in his everyday life rather than free-association. He contrasts the methods used in ordinary neuroses on the one hand and those useful for frankly psychotic patients, with special technics required to meet situations peculiar to borderline states.

The aim of such treatment is not the removal of neurotic symptoms, which act in these cases as a protection against more serious breakdown, but rehabilitation to useful function through a sustained treatment relationship and through the patient's increased awareness of his protective devices in dealing with people, which he had acquired in reaction to deep hurts early in life. Because of disturbed familial attitudes in such cases, the therapist is often obliged to become the "family doctor" for troubled current relationships.

The premises on which the outline of psychotherapy is based are discussed in relation to the nature of the therapist's attitude, the kind of interpretations given, and the goal of treatment. Attention is called to selective measures required in regard to: (1) fantasy, (2) hostility, (3) homosexual material, (4) acting out, and (5) suicidal impulsions. Specific auxiliary measures are presented in relation to work at the various phases of therapy.

The differential psychotherapeutic procedures outlined in this plan can be utilized to a large extent by therapists of diverse theoretical orientation. 18 references.—*Author's abstract.*

the "shock" therapies

Treatment of Psychoneurosis. W. LIDDELL MILLIGAN, London, England. Brit. M. J. 1426-29, June 1951.

After briefly discussing the attempts made by various workers to reduce the severity of the induced therapeutic convulsion, the author describes a nonconvulsive method of treatment. The Shotter-Rich electronarcosis apparatus is used. After intravenous injection of thiopentone (0.6–0.8 Gm.) and tubocurarine (10–15 mg.), a current of 85 mA is passed through temporal electrodes for an arbitrary period of 15 minutes. Standard general anesthetic precautions are taken; atropine, 1/75 Gm., by injection and seconal, 1½ Gm., are given orally as premedication.

An average of 12 treatments produced good results in 30 depressives; the response being somewhat slower than with E. C. T. A complete remission resulted in 10 out of 15 paraphrenics and in 8 out of 10 paranoid schizophrenics; an average of 15 treatments was given.

The treatment does not produce confusion. By connecting pairs of electrodes in series, 2 or even 3 patients may be treated simultaneously. 7 references.—*Author's abstract.*

Electroshock Therapy in Schizophrenia: A Statistical Survey of 455 Cases. DWIGHT M. PALMER, HARRY E. SPRANG, AND CLARENCE L. HANS, Chillicothe, Ohio. J. Nerv. & Ment. Dis. *114*:162-71, August 1951.

This study was limited to an investigation of the clinical effects of a single series of electroshock treatments, given in a single hospital, under standard conditions, to 455 male veterans. This group of patients was selected from a much larger number on the basis that each patient was diagnosed as having a well defined schizophrenic reaction and that none of them had had any form of prior shock treatments. The data was treated by statistical methods through the cooperation of the department of mathematics of Ohio State University.

Each patient received the number of treatments that was considered adequate for his individual condition. The majority of the patients received from 16 to 20 electroshock treatments.

Immediately following the treatments 198 of the 455 patients (or 43.5 per cent) showed either marked or moderate improvement, but 69 of these 198 patients had a relapse before they could be discharged from the hospital. More relapses occurred soon after discharge from the hospital so that at the time of the evaluation only 80 of the 455 patients were in full remission, 17.6 being the percentage.

It was determined statistically that there was a definite relationship between the length of illness before treatment and the occurrence of remission following treatment, in that the shorter the illness, the more favorable was the result. Hebephrenics appeared to respond somewhat less favorably than catatonics. Those who responded well to electroshock therapy were significantly younger in age than those who did not improve, but further analysis showed that the patients who responded satisfactorily had been ill for a shorter period and that the duration of illness, and not the age of the patient, was the important prognostic factor. 15 references. 17 figures.—*Author's abstract.*

Psychological Observations on Psychosurgery Patients. C. LANDIS, New York, N. Y. Psychoanalyt. Quart. 25:409-17, July 1951.

The results of the psychologic investigations conducted in the Columbia-Greystone and in the New York State Brain Research Project were summarized. The tests and experiments designed to show whether or not changes took place following psychosurgery in a wide variety of psychologic functions were considered. It was pointed out that transient changes may occur in any patient in virtually any psychologic function during the first two or three months after psychosurgery, but there was little uniformity in these changes. Surgery which involved agranular tissue was more apt to produce a wider variety of psychologic changes than was surgery involving the granular portions of cortical frontal lobe tissue. There was no evidence of permanent alteration or damage in intellectual or personality function which was touched on by any of the tests with the exception of the changes or losses in morbid affectivity.

Positive alterations brought about by psychosurgery were grouped into the concepts of vigilance, anguish and zeal. During the immediate postoperative period psychosurgery patients showed a marked increase in sleepiness, inattentiveness, evasiveness, etc., which was considered to indicate a diminished vigilance. The families of patients who benefitted from surgery reported some diminution in zeal (active interest and enthusiasm). This decrease seemed more marked during the first six months and tended to disappear during several years following operation.

The loss of morbid affect or anguish is the principal reason for psychosurgery. This loss could not be related systematically to a particular area of the frontal lobe involved in the surgery, to any one of the psychiatric diagnostic groupings, to the length of illness of a patient nor to combination of factors which could be specified. It was pointed out that surgery seems to start some physiologic change which brings about decrease in anguish, and the operation is not the cause of the loss.

The necessity for devising tests or methods of prognosis of outcome which can be applied to mental patients before operation, thus increasing the overall effectiveness of psychosurgery, was discussed. There is a paucity of information available on the outcome of psychosurgery in patients where results were favorable. Further information is needed concerning the life adjustment of these patients after they leave the hospital, particularly those factors which may assist the patient in remaining in the community without recurrence of mental illness. Information on the counsel and advice which should be given to families and to employers of psychosurgery patients returning to the community is urgently needed.

Psychosurgery, successfully carried through, seldom does any damage to either intellect or personality. Further information must be obtained on long term development of the mental life and behavior of patients who recover from psychosis as a result of psychosurgery.

Changes in the Body Weight of Schizophrenic Patients Following Prefrontal Lobotomy. C. W. BUCK, H. B. CARSCALLEN AND G. E. HOBBS, London, Ontario. Am. J. Psychol. *108*:16-19, July 1951.

Previous studies have commented on the increase in weight that has been noted following the operation of prefrontal lobotomy. Many of these observations were clinical impressions and were based on patients who returned to their homes where they were under minimal control in terms of their diet.

This report concerns the statistical analysis of the changes in a group of 32 schizophrenic patients who remained in the hospital under supervision, irrespective of clinical improvement. The changes in weight were recorded shortly after the operation and at the periods of three and six months; they were related to the clinical improvement.

This group showed an average mean increase of four pounds at the sixth month period. The changes at the earlier period were all positive but so small they lacked significance. This rise in group mean was contributed chiefly by a small subgroup of 7 patients with gain in weight above 10 per cent of their preoperative level. For the most part they were patients who were considered to have made the most

marked improvement in their clinical picture following operation. When this gain was compared with their ideal weight, as determined by standard weight charts, it was found that they had simply risen in weight to their more normal level. Only 1 patient was considered to have developed obesity. The gain in weight would appear to be simply related to the amelioration of mental symptoms. 3 references. 2 figures. 4 tables.—*Author's abstract.*

Impotence During Electric Shock Therapy. S. T. MICHAEL, New York, N. Y. Psychoanalyt. Quart. 25:24-31, January 1951.

Four of 11 male patients, who were treated by electric convulsive therapy on an outpatient basis and who had access to their usual sexual activity, were found to be impotent after conclusion of a course of shock therapy. The impotence was verified by the wives of the patients and lasted from three to six weeks. Complete recovery occurred within six to ten weeks after shock treatment was discontinued. Presumptive factors responsible for the impotence were deemed to include suppression of pituitary gonadotrophic hormone either through subthalamic interference or through increased adrenocortical activity. Brain damage may also be responsible since impotence occurs after brain injury. A contributory factor may be disturbance of integration of the manifold factors of sex function which are highly complex in the human being. 13 references.—*Author's abstract.*

neurology

CLINICAL NEUROLOGY

Migraine and Other Head Pain. L. S. BLUMENTHAL AND M. FUCHS, Washington, D. C. Arch. Neurol. & Psychiat. 65:477-88, April 1951.

Until the past decade, the actual symptom of headache was minimized by both patient and physician. As is true in any other medical condition, the proper diagnosis and treatment in each case of headache must be preceded by a thorough and adequate history, physical and neurologic examinations, and appropriate laboratory studies.

In the clinical classification of headache for general medical use, headaches due to nervous tension, psychogenic factors or vasomotor instability of the cerebral blood vessels are more important numerically than headache due to intracranial disease, although the latter is feared by most patients with headache.

The patient suffering from headache due to nervous tension is in need of a physician who will spend the time and energy necessary to uncover the patient's entire story. Once this is understood, it is simple to evaluate the role of nervous tension. Most people are capable of a certain amount of work each day. The patient must be instructed in the mechanism of action of excess nervous tension, which results in actual spasm and contraction of the muscles about the head and neck. When he

feels a tight, spastic condition in those areas, it is a warning that he is exceeding his limits and must relax.

Discussion and mental catharsis of his problems will improve his general mental condition and help prevent attacks of headache from developing. This is as important in headaches due to actual vascular, endocrine or traumatic condition and must be borne in mind in the handling of any case of chronic headache.

It is most important to define what we mean by migraine when we discuss headache in general. In true migraine, relief is obtained in 90 per cent of the cases by the injection of 0.5 mg. of ergotamine tartrate, if administered early in the attack. In atypical migraine, the same method of treatment may be used.' However, the further from typical migraine the case may be, the less satisfactory migraine therapy may be. Many of these atypical forms of headache will be on a psychogenic basis or may closely resemble histamine cephalalgia.

The intensity of attacks varies greatly, from a few hours at the time of menstruation, to severe attacks lasting several days at a time. During an attack, the patient must learn to retire to a quiet, cool, dark place and recline if possible. He should be instructed in the proper administration of ergotamine tartrate, dihydroergotamine, the new "cafergot" for oral use or a rectal suppository made up of a combination of ergotamine tartrate. In the case of the occasional patient who will not respond to any of the drugs mentioned, one of the following procedures may be tried, although their exact value is yet to be determined: (1) intravenous administration of nicotinic acid; (2) inhalation of 100 per cent oxygen for several minutes; (3) intramuscular injection of octin; (4) intravenous injection of 50 cc. of 50 per cent dextrose; (5) oral or intravenous administration of one of the antihistamine preparations; (6) administration of sedative doses of barbiturates, or even narcotics, for a severe attack.

A proper understanding of the patient's individual problem is the cornerstone to the long-range treatment of migraine. Any definite contributory causes found in the examination should be corrected.

Histamine cephalalgia and its differentiation from migraine was first reported by Horton in 1939. Gradually increasing subcutaneous doses of histamine, given twice daily, usually will bring about cessation of attacks. The usual headache of essential hypertension, like the migraine headache, is vascular in origin and has also been found to be associated with delation and stretching of the extracranial and the dural arteries.

Vasodilating headache is a prominent feature of the post-traumatic cerebral syndrome. In most cases a large functional element is at work. Daily intravenous administration of histamine resulted in rapid improvement in several recent cases.

Neither increased blood pressure nor increased spinal fluid pressure is directly correlated with the occurrence of headache in hypertensive persons, and drugs reducing blood pressure are not successful in relieving the headache.

In the treatment of the typical hypertensive headache, maintenance of a blood level of 8 to 12 mg. per 100 cc. of potassium thiocyanate often controls recurrent hypertensive headaches. Many patients can obtain relief of severe headaches after undergoing lumbar sympathectomy.

Temporal arteritis usually occurs in persons over 60 years. The mechanism of the pain is inflammatory irritation of the temporal arteries and periarterial tissues. Resection of a small segment of the involved artery usually is necessary for relief of pain. 33 references.—*Author's abstract.*

A Clinical Report of the Relief of Headaches Non-Responsive to Analgesics. CHARLES K. SHOFSTALL AND WILLIAM H. SHOFSTALL, Kansas City, Mo. J. Kansas M. Soc. 52:366-67, August 1951.

This study indicates that patients complaining of headaches not controlled with ordinary analgesics can be aided greatly by the use of an ergotamine tartrate and caffeine combination, available as Cafergot. Eighty-five per cent of the patients could abort their attacks when they took this medication at the prescribed time. Also, further benefit can be derived by these patients complaining of dizziness, nausea, and nervousness by the addition of one tablet of an antispasmodic plus phenobarbital (Belladenal). Our findings confirm the work of other investigators who have found Cafergot to be effective for the relief of the so-called vascular headache. We, however, referred to these vascular headaches as those unresponsive to analgesics. It is our opinion that further investigation may show that there are other factors in addition to the vascular components involved in this type of headache which is unresponsive to analgesics. 9 references.—*Author's abstract.*

The Relationship of Biliary Tract Disorders to Migraine. J. RUSSELL TWISS, New York, N. Y. Gastroenterology *17*:28-31, January 1951

A comprehensive diagnostic investigation of the gallbladder and liver in 25 patients having migraine from 4 to 50 years revealed in 21 no evidence of biliary tract disorders. In the 4 patients having evidence of biliary tract disorders, there was no apparent relationship to the migraine. The incidence of biliary tract disease in this group was not higher than that of the general population. In 12 migraine patients having had cholecystectomy, the severity of symptoms following operation was improved in 2, the same in 6, and worse in 4 patients.

This investigation gives no evidence that biliary tract disturbances are an etiologic factor in migraine.

The relief of biliary tract symptoms by either medical or surgical means resulted in no improvement of the migraine state in the majority of the patients studied. 11 references. 3 tables.—*Author's abstract.*

Aphasia in a Deaf Mute. LOUIS L. TUREEN, EDMUND A. SMOLIK, AND JACK H. TRITT, St. Louis, Mo. Neurology *1*:237-41, May-June 1951.

Aphasia in deaf mutes, postulated by Hughlings Jackson in 1878, was first described in a case report by Grasset in 1896; a second case was reported by Chitchley in 1938. This paper reports a third case of aphasia which developed in a 43 year

old male, right handed, congenitally deaf mute. Hemorrhage into a left frontal lobe tumor was precipitated presumably by a spinal air injection. Symptoms indicated that the tumor was apparently present for six months before Jacksonian convulsions and transient episodes of right hemiplegia appeared. There were no evidences of disturbance in dactylologic speech function even after the hemiplegia developed; communication was affected by sign language with the left hand. Sign language was equally well understood. Spastic right hemiplegia, mental disturbances, and subsequent loss of comprehension and performance of sign language and of writing, totally interfering with his power of communication, followed immediately after the air injection. The tumor (spongioblastoma multiforme), entirely subcortical, was located in the posterior halves of the second and third left frontal convolutions. At operation it was seen to be exerting pressure on the second. The posterior portion of the second frontal convolution was excised to uncover the tumor. Decompression, by evacuation of the blood contents of the tumor, resulted in prompt amelioration of symptoms referable to the speech disturbance.

In correlating the language disorder with the anatomic lesion, the following considerations were discussed. All practic and gnostic functions were retained with the exception of those involved in communication by the dactylologic method. Agraphia was permanent following the excision of the writing center (of Exner) in the foot of the second frontal convolution. The loss of finger spelling and gestural speech was not related to the lesion in the second frontal convolution, but rather to the lesion in the subcortex involving the association pathways from Broca's area. This was indicated by the recovery of these functions following the evacuation of the clot from the subcortex, whereas the second frontal convolution remained permanently injured. It would seem that the apraxia for finger speech is as much related to lesions affecting Broca's convolutions and its association pathways, as is the apraxia for articulative speech.

The dissociation between the ordinary and dactylologic form in reading in this patient, as represented by his ability to recognize the written and printed word, and his failure to recognize sign language, illustrates the relationship between Broca's area and the angular gyrus in the speech function. According to Nielsen, the angular gyrus contains, in its cortex, patterns for revisualization of the written word. In this patient these patterns were undisturbed while the patterns for revisualization of finger spelling were lost, producing a special form of reading disability. The deaf mute learns to read script and print silently. He does not hear or attempt to articulate the words he reads. In the dactylologic function, however there is a close and continued association between spelling the wôrds with the fingers and reading the words as they are spelled. This interdependence of praxia and gnosia results in a strong dependence of the angular gyrus on Broca's convolution for gnostic functions. In such cases the inability to recognize the finger spelling results from a lesion in Broca's convolution in spite of an intact angular gyrus.

The simultaneous disappearance of universal hand gestures, heavily weighed with affective quality, and finger speech, and its return before finger speech is con-

sistent with observations that affective speech is the first to recover in an aphasic disorder.—*Author's abstract.*

Fibrositic Headache. S. J. SHANE, Sydney, Nova Scotia. Canad. M. A. J. *65*: 339-41, October 1951.

The author calls attention to a rarely recognized clinical syndrome which he entitles "fibrositic headache." This type of headache can be diagnosed on history and physical examination alone, even prior to the exclusion of other forms of headache. It is due to fibrositis of the myofascial structures of the scalp and is usually associated with the presence of tender nodules, scattered throughout the scalp, but frequently at the sites of attachment of the posterior neck muscles. Pressure on these tender nodules reproduces and accentuates the headache. The writer correlates these findings with the concept of somatic trigger areas due to deep-seated visceral disease and calls attention to the fact that such trigger points can be inactivated by direct injection with procaine. The latter procedure was carried out in three typical cases of fibrositic headache, which are outlined in the paper. Relief of all symptoms was immediate and permanent. The author makes a plea for more frequent recognition of this syndrome in cases of persistent headache not falling into the usually accepted categories. 6 references.—*Author's abstract.*

Excessive Hunger as a Symptom of Cerebral Origin. W. R. KIRSCHBAUM, Chicago, Ill. J. Nerv. & Ment. Dis. *113*:95-111, February 1951.

The urge for food intake depends on stimuli from the digestive system to the neurovegetative and metabolic centers of the medulla oblongata, of the mid-brain and of the diencephalon, and on stimuli from certain cortical regions. Few of these areas are delineated accurately. Their relation to diagnostic localization is rather vague because of a variety of endogenous and exogenous psychic and somatic factors which combine in any remarkable changes in the drive for food. This study, a fraction of a complex problem, deals with the occurrence of hunger or excessive appetite resulting from organic brain diseases. The overindulgence in food, hyperorexia, though much less frequently observed, is a more significant and outstanding symptom for a neuropathologic investigation than the opposite, rather common appearance of anorexia.

Excessive hunger of cerebral origin was observed in 30 patients with various organic brain disease. Postmortem findings, previous case reports, and studies of the literature on animal experiments allowed a subdivision of the material according to the special brain structures involved. Diseases of the other systems being ruled out, the following conclusions were arrived at: It is reasonably safe to state that cortical or subcortical frontal as well as hypothalamic disturbances are conducive to changes in eating behavior experienced as excessive hunger. This symptom stands on the borderline between true psychic functions and psychosomatic reac-

tions. It is either conspicuous and primarily prominent or is only partially revealed among the variety of psychopathologic phenomena in the diseased mentality of the patient as a whole. Its significance as a release phenomenon is beyond doubt. It may combine, as the various frontal lobe processes show, with the hypokinetic-apathetic and with the hyperkinetic-hypomanic restless type of frontal lobe syndrome. Not infrequently, it appears with an amnesic confabulatory mental disturbance. It is likely to arise with alterations of orbital and mesialfrontal and basal areas converging to the di- and mesencephalon, as indicated by several cases with additional damages to the olfactory tracts and anterior cerebral fossa. Its independence from the precentral corticomotor pathways is as noteworthy as its lack of regular correlation with disturbances of other autonomic functions controlled by frontocortical centers, e.g., micturition. The symptom is likely to originate from a bilateral disturbance of the respective frontal and axial areas. It may initiate a disease of the frontal brain, and it deserves more attention as a local sign. In general, it is transient and reversible, more "separate" in frontal lobe lesions and "combined" with other vegetative and metabolic changes in diencephalic processes.

It remains to be investigated whether or not the symptom of excessive hunger is a response to a primary involvement of gastro-intestinal autonomic centers in the frontal lobes and in the diencephalon or a sequel to a gastro-intestinal overactivity reflecting on the cerebral centers. Independent of its central or peripheral origin, excessive hunger is a sensory phenomenon at a lower integration of consciousness. It appears to be a regressive pattern of reaction, a preformed mechanism, displayed also in psychoneurotic conditions and functional psychoses. 67 references. 3 tables.—*Author's abstract.*

The Palmomental Reflex: A Physiological and Clinical Analysis. JOHN R. BLAKE, JR., Cleveland, AND E. CHARLES KUNKLE, Durham, N. C. Arch. Neurol. & Psychiat. 65:337-45, March 1951.

The palmo-mental reflex, first described 30 years ago by Marinesco and Radovici, is a fleeting unilateral contraction of the chin muscle on stimulation of the thenar eminence of the ipsilateral hand. It has received only cursory attention except in the continental literature. It is found in one-half the normal adult population, and most observers have found it with greater frequency in infants.

Observations on the palmo-mental reflex were made on 170 normal adult subjects and 43 patients with structural diseases of the nervous system. Three lines of study were followed:

1. The characteristics of the normal reflex were noted.
2. Attempts were made to modify the response by selective blocking of the afferent pathways or by the induction of pain in, or adjacent to, the receptive area of the reflex.
3. An appraisal was made of the clinical significance of the reflex in neurological disease, extending the observations already recorded in the literature.

From experimental analysis of its mechanism, it is tentatively inferred that the afferent arc employs superficial fast conduction pain fibers. The pattern of the

response suggests a fragmentary wince. As has been reported by other investigators in the past 30 years, the reflex is commonly, but not predictably, accentuated on release from cortical control.

The reflex has limited clinical value, but when exaggerated, it is a useful alerting sign of suprasegmental motor disease. 24 references. 3 figures. 4 tables.—*Author's abstract.*

Adie's Syndrome: A Benign Disorder Simulating Tabes Dorsalis. A. B. KERN, Providence, R. I. J. A. M. A. *145*:230-31, Jan. 27, 1951.

Adie's syndrome, a benign disorder, is of significance mainly because of its occasional confusion with tabes dorsalis. The observation by the author of a patient with this syndrome who was diagnosed erroneously as syphilitic suggested the need for again focusing attention on this condition.

Adie's syndrome has been described as the complete form, in which one finds the typical tonic pupil with absence of tendon reflexes and the incomplete forms in which one observes: (1) tonic pupil alone, (2) atypical phases of the tonic pupil alone, (3) atypical phases of the tonic pupil with absent reflexes, or (4) absent reflexes alone.

The pupil of Adie's syndrome is larger than normal and is oval or irregular in shape. It shows complete or almost complete failure to react to light, but after remaining in the dark it will dilate, and exposure to bright light will then induce a slow contraction. Fixation of a near object results in a very slow contraction; fixation of a distant one leads to a sluggish dilation. The tonic pupil shows a prompt and complete dilation in response to mydriatics.

Although the Argyll Robertson pupil of tabes may resemble the tonic pupil superficially, the two can be readily differentiated. The former abnormality is usually bilateral while the latter is unilateral. The Argyll Robertson pupil is contracted, fails to react to light even after remaining in the dark, contracts and dilates promptly on fixation of near and distant objects, and shows a slow and incomplete response to mydriatics.

In the complete form of Adie's syndrome, there is absence of one or both ankle jerks; loss of other tendon reflexes may occur but not when both ankle jerks are present. In tabes there is generally loss of ankle and/or knee jerks; the former may be present and the latter absent.

Adie's syndrome occurs predominantly in women and usually becomes evident in young adulthood. Tabes dorsalis is seen more frequently in men and develops later in life.

The Argyll Robertson pupil is most commonly a manifestation of tabes dorsalis and is accompanied in almost all cases by an abnormal spinal fluid and other evidence of syphilis. Whereas the etiology and pathogenesis of Adie's syndrome is still obscure, it is generally accepted that it is not due to syphilis and that it is a completely benign condition.—*Author's abstract.*

ANATOMY AND PHYSIOLOGY OF THE NERVOUS SYSTEM

Blood Flow and Oxygen Consumption of the Human Brain during Anesthesia Produced by Thiopental. RICHARD L. WECHSLER, ROBERT D. DRIPPS AND SEYMOUR S. KETY, Philadelphia, Pa. Anesthesiology *12*:308-14, May 1951.

The effects of intravenous administration of sodium thiopental in anesthetic doses (0.5 to 1.6 Gm.) were studied on the blood gases, blood pH, mean arterial blood pressure (MABP), cerebral blood flow (CBF), cerebral metabolism ($CMRO_2$), and cerebral vascular resistance (CVR) of 12 patients. Bilateral measurements were made in 10 of these cases.

The most striking result was a significant ($p < 0.05$) depression of $CMRO_2$ from a normal value of 3.3 to a mean of 2.1 cc. of O_2 per 100 Gm. of brain per minute. In spite of a lowered MABP of 71 mm. Hg (normal = 85 mm. Hg), the CBF was slightly higher than normal with a mean value of 61 ml. per 100 Gm. per minute (normal = 54). This is explained by the significant ($p < 0.01$) lowering of the CVR (1.3 units compared with a normal mean of 1.6 units). This lowering was caused by the slight anemia and the increased pCO_2 in the arterial and internal jugular blood. This increased pCO_2 was probably due to the respiratory depression which usually accompanies pentothal anesthesia. In our present state of knowledge there is little basis for speculation as to the meaning of the significant ($p < 0.05$) depression of the cerebral R. Q. from a normal value of unity to 0.89. These studies indicate that thiopental depresses $CMRO_2$ in spite of the adequate supply of O_2 available to the brain.

The results of the bilateral measurements are interesting. Mean values for arteriovenous oxygen difference, blood flow, oxygen consumption, and vascular resistance obtained from the right internal jugular vein were practically identical with those obtained from the left side. Furthermore, in the individual cases, the differences in cerebral blood flow or oxygen consumption between the two sides were within the experimental error of the method, as measured by duplicate determinations on the same side (with F values of 1.05 and 1.53 for blood flow and oxygen consumption respectively). It is concluded from these data that there is adequate mixing of cerebral venous blood from cortical and subcortical areas before it enters the jugular vein. 13 references. 2 tables.—*Author's abstract.*

Quantitative Effects of the Peripheral Innervation Area on Nerves and Spinal Ganglion Cells. MARGARET W. CAVANAUGH, Chicago, Ill. J. Comp. Neurol. *94*:181-219, April 1951.

Since regenerating nerve fibers prevented from making terminal connections have been found to remain atrophic when compared with control fibers regenerating into an end organ, a study was undertaken to determine the effect of alteration of the peripheral innervation area on nonregenerating fibers and spinal ganglion cells in white rats. Deprivation of periphery was effected by sealing the proximal stump of nerves in plastic caps. Increase in the peripheral area was achieved by inter-

rupting intercostal nerves at a distance of about 1.5 cm. from the ganglion, which was found to result in the death of approximately one-half of the cells in the ganglion. As a consequence, the remaining one-half of the cells were confronted on regeneration, with the whole former periphery.

Plastic caps remained essentially unaltered in consistency for longer than a year after the operation. Teased preparations and sections of nerves within caps revealed small fibers making loops and turning proximally up the nerve. Average fiber cross in intercostal and soleus nerves declined to about 50 per cent after prolonged disconnection, while the actual number of fibers increased to about 50 per cent above that of the control nerves. This is due, in part, to doubling back of fibers and probably to branching of fibers in the capped region, although few instances of the latter were found.

Ganglion cells of chronically disconnected nerves showed a permanent alteration of the Nissl body pattern which was manifested in a powdery appearance of the chromatophile granules about 50 days after capping subsequent to the immediate effects of chromatolysis.

Capping or crushing of the intercostal nerves about 1.5 cm. from the ganglion led to a loss of about 50 per cent of the cells after 50 days. Capping of the nerves was followed by a rapid loss of average cell volume amounting to 30 per cent at 4 days and 40 per cent at 10 days. At 20 and 30 days there appeared to be a recovery of cell volume which is thought to be a consequence of the disappearance of a large number of small cells. Forty days after the operation the loss in cell volume was approximately 40 per cent, remaining at this level up to a year after the operation. Size changes in the nucleus preceded those occurring in the cell. There was an initial average volume loss of nearly 10 per cent after 4 days followed by a recovery in size (thought to be due to the disproportionately greater depletion of small cells) and a permanent loss of about 20 per cent. Loss in nucleolar volume was about 16 per cent after 103 to 360 days of capping.

Increasing the peripheral innervation area resulted in an increase in average cell volume of about 32 per cent 200 to 300 days after the operation. No appreciable increase was found in nuclear volume.

Reconnection of nerves to periphery for 80 days, after 130 days of capping, did not result in an appreciable recovery in size of the nerve cells, but an increase of 25 per cent was found in soleus nerves released about 60 days after slightly more than 300 days of capping. 32 references. 15 figures. 13 tables. —*Author's abstract.*

The Branching of Nerve Fibers in Human Cutaneous Nerves. J. O. LAVARACK, S. SUNDERLAND AND L. J. RAY, Melbourne, Australia. J. Comp. Neurol. *94*:293-311, April 1951.

Human cutaneous nerves have been examined for branching of fibers in the main trunks. The method employed was to prepare transverse sections, stained by an osmic acid technic, from each nerve at two widely-spaced levels. The total fiber count and fiber caliber spectrum at the one level were then compared with the

corresponding values at the other. The nerves selected for investigation were the superficial radial nerve at the elbow and in the forearm, where it emerged from beneath the tendon of the brachioradialis muscle, and the sural nerve in the popliteal fossa and the calf, before its union with the sural communicating nerve. The nerves were obtained from two autopsy subjects and three specimens of each were examined. In all except one nerve there was a significantly greater number of fibers and a change in the fiber caliber spectrum at the distal level. From this it was deduced that some fibers branched between the levels examined. The magnitude of the increase in number of fibers indicated that less than half of them had branched between these levels. 65 references. 6 tables.—*Author's abstract.*

CEREBROSPINAL FLUID

See Contents for Related Articles

CONVULSIVE DISORDERS

Diencephalic Epilepsy and the Diencephalic Syndrome. H. MANDELBAUM, Brooklyn, N. Y. Ann. Int. Med. 34:911-20, April 1951.

A case of diencephalic epilepsy due to mumps encephalitis is reported. The patient exhibited a wide range of emotional symptoms, including rage and libido. Vasomotor instability and autonomic functional disturbances were manifold. These included skin changes, perspiration, wide fluctuations in blood pressure, irregularity of heart rhythm due to premature contractions, changes from hypothermia to low-grade fever, diabetes insipidus, occasional glycosuria, colonic irritability, and dysmenorrhea and menorrhagia. Somatic tremors recurred frequently. This case embodies many of the features of Penfield's case of diencephalic epilepsy, which was due to a tumor causing pressure on the third ventricle. Sedation proved of no value. Large doses of estrogenic hormone resulted in establishing a remission and ultimate cure.

The diencephalic syndrome is more common. It embodies the characteristic emotional, vasomotor, and autonomic disorders described above. The effective inhibitory action exerted by estrogens in controlling the diencephalic unrest led in the case of diencephalic epilepsy to a trial of a similar treatment program in the cases demonstrating the diencephalic syndrome. Here again, adequate dosage of estrogens controlled the symptoms. Moreover, treatment with estrogens has been effective in delaying the appearance of sustained hypertension in many of these patients.

The benzodioxan test in patients exhibiting the diencephalic syndrome resulted in a pressor response, a rise in systolic blood pressure of 40 mm. of mercury or more. 6 references. 1 figure.—*Author's abstract.*

Phenomena and Correlates of the Psychomotor Triad. WILLIAM G. LENNOX, Boston, Mass. Neurology *1*:357-71, Sept.-Oct. 1951.

Of 1,900 office patients, 20 per cent gave a history of psychomotor (temporal lobe) seizures. With the increasing age of patients, there was an increase in the incidence of psychomotor seizures (relative to other types) and an increase in the number of patients having both psychomotor and grand mal seizures. Sixty-three per cent of all psychomotor patients had a history of grand mal also, but only three per cent a history of petit mal. In the grand mal psychomotor group, grand mal began a year or more before psychomotor seizures in 64 per cent, and a year or more after in 36 per cent. Acquired brain pathology antedated the onset of epilepsy in 33 per cent of patients having both convulsions and psychomotor seizures, and in only 15 per cent of patients having only a member of the petit mal triad. The incidence of epilepsy among near relatives was 2.7 per cent for patients having psychomotor seizures (alone or associated with grand mal), but 5.4 per cent for those with a history of petit mal and grand mal.

These data suggest that psychomotor seizures may arise as a consequence of damage to a temporal lobe, possibly as a result of earlier convulsions, anoxia, trauma, or infection. 19 references. 5 figures. 2 tables.—*Author's abstract.*

DEGENERATIVE DISEASES OF THE NERVOUS SYSTEM

Visual and Motor Changes in Patients with Multiple Sclerosis: A Result of Induced Changes in Environmental Temperature. THOMAS C. GUTHRIE, New York, N. Y. Arch. Neurol. & Psychiat. *65*:737-51, April 1951.

Climate and temperature have been recognized as affecting the incidence of multiple sclerosis. An inverse relationship between reported mortality due to multiple sclerosis and mean annual temperature has been described. The clinical observation has been made that heating and chilling both adversely affect the patient with multiple sclerosis.

In questioning an unselected group of 10 patients with multiple sclerosis on a male neurology service in a large Veteran's Administration Hospital, there proved to be an 80 per cent incidence of intolerance to bathing in hot water.

A group of 10 patients with multiple sclerosis have undergone total and partial body immersion in hot, tepid, and cold water. Their responses have been compared with those of 10 patients with other neurological disease, including six relatively normal patients and four with generalized weakness from debilitating disease processes other than multiple sclerosis. In the group of 10 multiple sclerosis patients, the painless total and partial immersion of the body in water at a temperature of 105 to 114 F. produced marked changes. These included generalized weakness, testable arm and leg weakness, increase in dysarthria, decrease in visual acuity, and visual field changes. These visual field changes included the appearance and enlargement of central scotomata and the appearance of new paracentral

scotomata. This adverse visuomotor response to heating did not occur in tepid or cold water. All changes secondary to heating were immediately reversible when the patient was cooled.

In the control group, identical procedures in slightly hotter water produced no visuomotor changes, except a slight (5 to 10 per cent) decrease in strength below preheating levels.

In the patient with multiple sclerosis, this adverse visuomotor reaction to heating appeared when the legs, both arms, or one arm were immersed in hot water. Either arm, if immersed, produced a reaction in the same subject. When one arm was immersed, the reaction could be interfered with by using an arterial tourniquet on the arm above the level of immersion.

It has also been possible to produce a reaction of weakness, decreased visual acuity, and increased dysarthria by placing the patient in a fever cabinet using dry heat. It was necessary to raise the temperature of the cabinet to 115 F. for 15 to 30 minutes.

This visuomotor response to heating in the patient with multiple sclerosis occurred usually, but not necessarily, with a slight elevation of body temperature. It was also associated with an elevation of skin temperature in nonimmersed parts of the body, but the reaction to heating and changes in skin and oral temperature were not concurrent.

The reaction to heating did not depend on the clinical type or duration of the multiple sclerosis. Each patient had his own particular response pattern to heat, which different methods of heating brought out. No light was shed on the mechanism of this response to heating by studies of venous coagulation time and serum calcium, potassium, and cholesterol levels. During heating, no changes were observed in the caliber of the retinal vessels. Attempts to block this reaction with acetylsalicylic acid, caffeine, and ergotamine tartrate have failed. 28 references. 1 figures. 2 tables.—*Author's abstract.*

The Effects of Stress and the Results of Medication in Different Personalities with Parkinson's Disease. J. S. PRICHARD, R. S. SCHWAB, AND W. A. TILLMANN, Boston, Mass. Psychosomatic Med. *13*:106-11, March-April 1951.

It became apparent when treating a large group of patients with Parkinson's disease that some of the patients did considerably better than others. It was also apparent that while some patients reacted very unfavorably to a stressful situation, this was not true of others.

For the purpose of this communication, patients were divided into four groups, and the results of stresses were compared among the groups.

Group A were stable easy-going, adaptable, people who took the world as they found it.

Group B was more sensitive, vulnerable, and suggestible than group A.

Group C was composed of people who set themselves unusually high standards in one way or another. It includes the assertive, determined, driving people as

well as the worrying, demanding, people who are sometimes over-concerned about their health.

Patients in the above three groups are all from the psychiatric point of view normal people.

Group D included patients with psychopathology obvious enough to make a psychiatric diagnosis, in addition to the Parkinson's disease, possible.

This personality grouping was checked as follows:

1. Reclassification was made at an interval of at least six months without reference to the previous classification.

2. About one-third of the patients had specific psychiatric interviews. This was carried out by one of us who had not done the group classification.

3. Rorschach tests were done on 12 patients by consulting psychologists.

4. The 16 personality factor questionnaire designed by R. G. Cattell was used.

All four methods showed that there was a sufficient measure of agreement to suggest the utilitarian classification being a good approximation.

It was found that group A usually did well with medication; Group B, slightly less well; and Group C, much less well. Group A rarely reacted very unfavorably to stress, group B reacted unfavorably more often, and group C reacted unfavorably in more than 50 per cent of the cases.

It is felt that a personality classification of this kind is of some value in giving a prognosis in patients with Parkinson's disease. 7 references. 3 figures. 1 table.—*Author's abstract.*

An Assessment of Therapy in Parkinson's Disease. ROBERT S. SCHWAB, JOHN F. PRICHARD, Boston, Mass. Arch. Neurol. & Psychiat. *65*:489-501, April 1951.

Since 1817, when Parkinson's Disease was first described, to the present time, a very large number of different medications have been tried. Very extravagant claims have been made for many of them. It is pointed out that there are at least two very good reasons, apart from the enthusiasm of the observer, why this should be so. In the first place the improvement to be expected from even the best drug we have at our disposal is not more than about 25 per cent remission of symptoms. A less effective drug may produce a 20 per cent remission of symptoms. The difference between these two is only 5 per cent of the total, which is difficult to assess. In the second place, the symptoms of Parkinson's Disease vary greatly from time to time according to a number of factors, such as emotional state or the degree of fatigue.

An attempt has been made to overcome these difficulties by using a number of objective tests such as a hand dynamometer, the finger-thumb proximation rate, circle drawing, speed of getting out of a chair, handwriting, gait, electromyogram, and neurological assessment. In addition, an attempt was made to assess the mood of the patient.

Four types of therapy have been used on our patients:

1. Physical therapy: routine massage and passive movements were found to be

of very temporary benefit only. Progressive resistance exercises of involved muscles produced some rather greater temporary improvement.

2. Psychotherapy: two-thirds of the patients having regular psychotherapeutic interviews reported improvement while the interviews were taking place. When the interviews stopped, this subjective improvement disappeared.

3. Surgical treatment: specific surgical measures were not encouraging although section of the extrapyramidal fibers in a cerebral peduncle produced considerable improvement in the patient upon whom it was tried.

4. Drug therapy: seventeen different drugs have been tried. The ten that produced the greatest remission of symptoms were: Artane, Panparnit, Benadryl, Stramonium, Thephorin, Diparcol, Scopolamine, Dramamine, Myanesin, and Amphetamine, in that order of usefulness. It is emphasized that each drug, either alone or in combination, must be pushed to the limits of tolerence. 14 references. 3 figures. 2 tables.—*Author's abstract.*

DISEASES AND INJURIES OF THE SPINAL CORD AND PERIPHERAL NERVES

See Contents for Related Articles

ELECTROENCEPHALOGRAPHY

Encephalogram in Subacute Progressive Encephalitis. W. COBB AND D. HILL, London, England. Brain. *73*:392-404, September 1950.

The electroencephalographic findings in 5 patients suffering from subacute progressive encephalitis are described. One patient, whose clinical story is given in detail, is still alive, and the diagnosis is based on a biopsy. In the remaining 4 cases, which have been reported clinically elsewhere, the patients have died, and it has been possible to establish the type of encephalitis. Three were of the inclusion body (Dawson) type and one of the sclerosing type of van Bogaert.

The electroencephalographic records of all the patients showed common features, and in three of them it was possible to make serial records covering sufficiently long periods to be able to recognize progressive changes. These consisted in the disappearance of normal rhythms and their replacement by slow waves, with the development of a recurring complex of high voltage slow waves. In the early stages there were single spikes and other paroxysmal disturbances in the frontal regions, while in the latest stages the recurring complexes stood out against an almost featureless background.

The complex usually consisted of two or three slow waves, but was so variable from record to record as to prevent a common description. Although it varied greatly in the records of the same patient, and still more from patient to patient, its stereotyped character in any one record was most remarkable. Similarly, the inter-

vals between complexes varied from 4 seconds in one case to 20 seconds in another, but in a given record the variation was much less: in one, it was 5 to 8.5 seconds with a mean of 7.3 seconds. In another case the mean intervals at weekly tests were 9.4; 8; 10.5; 9.2; 8.4; and 8.7 seconds. When involuntary movements, so characteristic of this disease, occurred, they did so in close time relationship to the complexes.

We believe that this picture of a stereotyped complex recurring fairly regularly (at intervals of about 8 seconds) is characteristic of and diagnostic of this disease. We have not observed it in any other condition; it has not been reported in any other type of encephalitis; no electroencephalogram of a case of subacute progressive encephalitis (Dawson or van Bogaert) has been reported without it. On the other hand, Rademecker has published 3 similar cases, one has been reported by Hess et al, and we know of one or two more English cases.

Some possible associations and mechanisms of causation are discussed, but surprise is expressed that the picture seems to be unique to this disease. 11 references. 8 figures.—*Author's abstract.*

Electroencephalographic Evidence of Thalamic and Hypothalamic Epilepsy. E. L. GIBBS AND F. A. GIBBS, Chicago, Ill. Neurology *1*:136-44, March-April 1951.

Fourteen and 6 per second positive spikes have been encountered during sleep in six per cent of patients with a clinical history of epileptiform disorder and two per cent of 300 control subjects. Such spikes are distorted forms of the normal sleep patterns which have been shown in animals to originate in the thalamus and hypothalamus. The diffuseness of the discharge and the general positivity of the spikes suggest a subcortical origin.

The clinical correlates of 14 and 6 per second positive spike discharges suggest epileptic disorder in the thalamus and hypothalamus; attacks of pain, rage, and vegetative symptoms are common. Though easily confused with psychomotor epilepsy and other epileptic syndromes, general and specific differences usually permit the informed physician to make a correct clinical diagnosis even without an electroencephalogram, but a record of the electrical activity of the cortex in sleep clinches the diagnosis. As compared with other types of epileptic and epileptiform disorder, 14 and 6 per second positive spikes are relatively benign. A few discharges of this pattern, particularly in children, in the absence of symptoms should not be regarded too seriously. They are likely to remain asymptomatic and disappear with increasing age. When symptoms are present, demonstration of such disorder is important not only as an aid to diagnosis, but as a clue to treatment. Fortunately, such disorder usually responds well to a combination of Dilantin and Phenobarbital, or Dilantin and Mesantoin. 5 references. 1 figure. 3 tables.—*Author's abstract.*

Electrographic Changes Immediately Recorded from the Exposed Human Brain during Cardiazol Convulsion. TOYOJI WADA, Tokyo, Japan. Tohoku J. Exper. Med. *53*:59-68, December 1951.

In 6 cases, electrographic changes induced by cardiazol convulsion were observed by recording directly from the brain. The direct effect of cardiazol upon the cortex in man was tested by local application. With few exceptions, there was a close resemblance between the corticogram and EEG recorded via the scalp. At the end of the cardiazol injection, the cortex passes first into a state of excitation and then into a convulsive discharge consisting of spikes of ca. 10 per second which gradually enlarge: these potentials constitute a sort of damped oscillation suggesting a neuronal process of synchronized propagation of cortical hyperactivity. In cases with a nonconvulsive response only the cortical excitation was observed. The controlling mechanism of the subcortical origin of convulsions was discussed. Simultaneously with the recovery from unconsciousness, the alpha-rhythm returns, but recovery of the subcortical pattern seems to be required for complete recovery of consciousness. 19 references. 1 table. 8 figures.—*Author's abstract.*

HEAD INJURIES

See Contents for Related Articles

INFECTIOUS AND TOXIC DISEASES OF THE NERVOUS SYSTEM

A Disease Epidemic in Iceland Simulating Poliomyelitis (Une Maladie Epidemique en Islande Simulant la Poliomyelite). JULIUS SIGURJONSSON, BJORN SIGURDSSON, JONAN HJ. SIGURDSSON, JOHANN THORKELSSON AND KJARTAN R. GUDMUNDSSON, Copenhagen, Denmark. Acta Psych. et Neurol. Scandinavia *26*:67-90, January 1951.

A Disease Epidemic in Iceland Simulating Poliomyelitis. BJORN SIGURDSSON, J. SIGURDSSON, ET AL. The Am. J. Hyg. No. 2, *52*:222-38, 1950.

An extensive epidemic of a disease apparently involving the central nervous system broke out in the town of Akureyri in the fall or early winter of 1948. Although the majority of cases viewed individually would hardly have been distinguished from the lighter cases of poliomyelitis, the whole epidemiologic and clinical picture of the epidemic was so peculiar that, in the absence of confirmatory virus findings, it was not considered justifiable to put it on record as an epidemic of poliomyelitis.

The epidemic reached a peak in the last week of November (129 cases) and died out in February. In all, 165 cases were reported in the town, a case incidence of

6.7 per cent of the population. Pareses in varying degrees was observed in 129 cases, but there were no deaths. The disease appeared to spread through personal contact; cases were particularly numerous in schools, except in the elementary school.

The distribution of 453 cases according to age was as follows: 1–4 years, 6; 5–9 years, 18; 10–14 years, 37; 15–19 years, 133; 20-49 years, 227, and over 50 years, 32. Age was not stated in 12 cases. Thus the case incidence was highest by far in the 15–19 year age group, averaging 164 per thousand. Above the age of 20 years the incidence was very much higher among females than among males.

The clinical course was characterized by pains in the nape of the neck and back and often in one or more limbs, accompanied by fever, usually low. Muscle tenderness, often confined to small areas, was also a rather prominent symptom. Paresthesias and hyperesthesias were rather common: paresis of one or more muscle groups, irregularly distributed, developed in about 28 per cent of the cases. The fever sometimes lasted for several weeks, and relapses of fever, paresis, and sensibility disturbances were noticed weeks after the initial attack in several cases. The aches often persisted long after the disappearance of all objective symptoms, and complaints of nervous instability, irritability, and sleeplessness were conspicuously frequent for months afterwards. Symptoms of arthritis followed the illness in some cases.

Four samples of feces were tested for poliomyelitis virus with negative results. Similarly, tests for the Coxsackie type of virus on baby mice were negative. Complement-fixation tests of convalescent sera with antigens specific for several virus encephalitides also gave negative results.

Cases also occurred in the rural part of the Akureyri medical district and later on in several other districts, but extensive epidemics occurred in only two other medical districts. 6 references. 11 tables.—*Author's abstract.*

Infectious Mononucleosis with Predominantly Neurologic Manifestations: Report of a Case. WILLIS L. HUBLER, ALAN A. BAILEY, DONALD C. CAMPBELL AND DON R. MATHIESON, Rochester, Minn. Proc. Staff Meet. Mayo Clin. *26*:313-19, August 15, 1951.

Review of the literature revealed that a wide variety of neurologic syndromes may be secondary to infectious mononucleosis. Among these were serous meningitis, various lesions of cranial nerves, and sensory and motor involvement throughout the body. Six instances of convulsions occurring during infectious mononucleosis were encountered in the literature.

The authors' patient was a 17 year old boy who had consulted a physician because of a "cold." Generalized convulsions developed while he was receiving diathermy to the sinuses. On admission a few hours later he was semistuporous, with a rectal temperature of 101.2 F., mildly stiff neck, and a Babinski sign on the left. Results of the initial blood counts, including the leukocyte and differential counts, were normal. The cerebrospinal fluid was under normal pressure, was clear,

and showed 33 lymphocytes per cubic millimeter. The protein content of the cerebrospinal fluid was 120 mg. per 100 ml. During the first few days after hospitalization the patient gradually improved. However, a week later nausea and vomiting developed which were followed by generalized convulsions. He remained comatose for several hours. Stiffness of the neck was graded 1 to 2. Sustained ankle clonus was present bilaterally. Cervical lymph nodes were palpable for the first time. At this time leukocytoid and atypical lymphocytes were seen in a special blood smear. The result of the heterophil agglutination test was positive in a titer of 1:2,048 (normal, 1:64) and 1:896, after absorption tests with emulsion of guinea-pig kidney had been carried out, indicating that the antibodies were of the infectious mononucleosis and not the Forssman type. The patient's condition gradually improved, so that 12 days after the last convulsion he was asymptomatic. The authors say it is noteworthy that there were no palpable lymph nodes until after the last convulsion and that the spleen did not become palpable until five days later.

The authors emphasized the importance of considering infectious mononucleosis in encephalitis and serous meningitis of unknown etiology and the value of heterophil agglutination and agglutinin absorption tests in establishing the diagnosis.

INTRACRANIAL TUMORS

See Contents for Related Articles

NEUROPATHOLOGY

Dystropia Myotonica and Myotonia Congenita: Histopathological Studies with Special Reference to Changes in the Muscles. G. WOHLFART, Stockholm, Sweden. J. Neuropath. & Exper. Neurol. *10*:109-24, April 1951.

In an autopsy case of myotonic dystrophy no histopathologic changes were found in the spinal cord, sympathetic chain, or peripheral nerves. A number of ventral and dorsal spinal roots were analyzed, with negative results, by use of a special quantitative-histologic method.

Twenty-five muscle biopsies were examined from 18 patients with myotonic dystrophy. Several muscles were also taken from the autopsy case. The muscular changes are, under certain conditions, pathognomonic of myotonic dystrophy. The earliest and only constant change consists of an inward migration of nuclei from the periphery of the fibers into their inner parts, where they divide and form long chains. Capillary loops and connective tissue are inclined to grow into the fibers to nuclear rows. The myofibrils are often destroyed without a corresponding decrease in the sarcoplasm content. Therefore, the muscle fibers commonly contain a peripheral layer of sarcoplasm. The striated myofibrils often take another

course than the longitudinal and may form striated annulets in certain muscle fibers.

Six muscle biopsies were studied in 5 cases of myotonia congenita (Thomsen). There was a general hypertrophy of the fibers, and the nuclei often had a slight tendency to inward migration, as in myotonic dystrophy.

There is no correlation between myotonia and the histopathologic changes. 63 references. 6 figures. 2 tables.—*Author's abstract.*

NEURORADIOLOGY

Diagnostic and Therapeutic Nerve Blocks: Necessity for Roentgenograms. JOHN W. PENDER AND DAVID G. PUGH, Rochester, Minn. J. A. M. A. *146*:793-801, June 30, 1951.

Roentgenograms to show the position of the needles must be made when diagnostic and therapeutic nerve blocks are performed. Only by this means can the operator position the tips of the needles with enough accuracy to block individual nerves selectively with the use of small volumes of the anesthetic agent. The roentgenograms also serve as objective records which may be utilized later by the operator to obtain an exact repetition of the nerve block either by injection or by some other surgical procedure.

If the positions of the tips of the needles at the first block have been recorded on roentgenograms, the same or a different person may at a later time and in another place repeat the original nerve block, provided that the needles are shown by a second set of films to be in the same positions as at the original injection. It frequently happens that once the pain pathway has been established by diagnostic nerve blocks with short-acting anesthetic agents, more permanent interruption of the nerves transmitting the pain may be indicated. It is then desirable to repeat the original nerve block which gave temporary relief of pain exactly but also, to produce a therapeutic nerve block by the injection of a longer-acting agent, such as alcohol, ammonium sulfate solution, or phenol solution.

Roentgenograms taken during nerve blocking serve to convince the surgical or medical consultant as to the procedure which was performed. The patient is impressed with the accuracy of the procedure and is more inclined to accept the recommendation which the consultant makes on the basis of the diagnostic nerve block, whose accuracy is assured by roentgenograms. Once the nerve pathways of pain impulses have been established by nerve blocking, it may be advisable for such surgical procedures as section of a peripheral nerve, rhizotomy, chordotomy, or lobotomy to be performed. The surgeon knows from experience the inaccuracy involved in locating body segments and nerves by counting ribs or vertebral spinous processes. He is, therefore, likely to be reluctant to sever a specific nerve on the evidence of a diagnostic block, during which block this specific nerve was supposed to have been located by such measures as he knows to be inaccurate.

With the exact position of the tips of the needles used for diagnostic nerve blocks made known by roentgenograms, the ability to reproduce the effects of the block by section of the nerve can be predicted convincingly.

Technical suggestions concerning the use of roentgenograms during nerve blocks are outlined. 4 figures.—*Author's abstract.*

Deaths Related to Pneumoencephalography During a Six Year Period. JOHN B. WHITTIER, New York, N. Y. Arch. Neurol. & Psychiat. *65*:463-71, April 1951.

Six cases of death related to pneumoencephalography which occurred in a series of 2,190 procedures during a six year period (mortality 0.24 per cent) are evaluated with regard to clinical and pathological circumstances. Large space-occupying lesions were present in all 6 cases. Five of these were cellular neoplasms, and one was a vascular lesion, presumably neoplastic. Five of the lesions were supracallosal, and one was located in the temporal lobe. No symptoms occurred during the procedure to distinguish these cases. A rise in blood pressure after the procedure took place in 3 of the 6 cases. In 2 cases there were no signs of increased intracranial pressure before the procedure, and the spinal fluid protein was normal in 3 of the 4 cases of neoplasm.

It was concluded that when clinical evidence suggested the presence of a space-occupying lesion, probably large and supracallosal or temporal in site, ventriculography or arteriography should be elected, and pneumoencephalography should not be performed as a diagnostic procedure unless the patient has been prepared for such immediate surgical treatment as may be indicated by the results of the study. 5 references. 6 tables.—*Author's abstract.*

SYPHILIS OF THE NERVOUS SYSTEM

The New Lange Colloidal Gold Test in Psychiatry. N. E. STEIN, L. DEMELLO, AND B. DATTNER, New York, N. Y. New York State J. Med. *51*:617-18, March 1, 1951.

One of the newer tests aimed at the analysis of protein fractions contained in the spinal fluid is the "standardized quantitative" colloidal gold test of Lange. It uses a stabilized citrate gold which is added to spinal fluid diluted in a phosphate buffer, pH 7.4. The color differences vary from a color value of 0 to 20, the latter one indicating complete coagulation of the colloidal gold and the former an unchanged gold sol. In addition, a new element has been introduced into the interpretation of the gold curves by Lange and Harris in using the plateau figures of the curve as the discriminating factor. If contiguous tubes exhibit color values representing the same, or almost the same, degree of coagulation above a value of 6 even minor degrees of coagulation of the colloidal gold sol are considered significant of parenchymatous involvement of the central nervous system. Thus, many categories of patients who formerly did not show significant alterations of the colloidal gold are

now designated as patients with parenchymatous involvement of the central nervous system.

At Manhattan State Hospital 166 spinal fluids were examined last year by the New York State Department of Health laboratories. These spinal fluids were obtained from patients with all types of psychiatric disorders, among them 55 patients with neurosyphilis. Thirty patients of the nonsyphilitic groups showed no other spinal fluid abnormalities than minor forms of the so-called D- or parenchymatous type of Lange reaction, varying in degree from "weak" to "minimal." Among them were 11 schizophrenics, 9 alcoholics one of them with Korsakoff's syndrome, and 4 atherosclerotics. No patient of the manic-depressive type had a D-type curve.

It seems that with the inclusion of the minor variations of the curves as significant for parenchymatous involvement of the central nervous system the test loses its practical value as a diagnostic aid. It may, however, become of great help in differentiating between organic and functional disorders of the central nervous system. 2 references.—*Author's abstract.*

TREATMENT

Physical Therapeutic Measures in Hemiplegia. SHELBY G. GAMBLE AND WALTER J. ZETTER, Cleveland, Ohio. Cleveland Clin. Quart. *18*:217-20, July 1951.

The hemiplegic patient has always been a difficult problem. Many basic factors related to complex motor dysfunction are not completely understood. Generally speaking, the purpose of rehabilitation in the early stages is to prevent and correct any deformity that may occur and to increase muscle function. Later in the treatment program the patient is taught to perform the activities essential to daily living. Any treatment program must be adequate to meet the patient's needs for personal care, walking, and essential hand activities.

In patients in whom a diagnosis of either thrombosis or embolism has been made, the treatment program should be started immediately, and the patient gotten up to a sitting or standing position as soon as possible, depending upon the overall picture. Patients who have a diagnosis of hemorrhage should not be started on a rehabilitation program until the spinal fluid is clear and the clinical signs of meningeal irritation have subsided. Again, as a general statement, functional recovery is better in those patients who have had a thrombosis than in those who have had a hemorrhagic or embolic phenomenon.

Prolonged flacidity is always a poor prognostic sign as far as recovery of movement is concerned. Any muscle that is completely paralyzed for more than a period of three months from onset will probably never recover sufficiently to be of functional value.

The initial step is a program of passive exercises of the involved extremities, with special attention to the shoulders and shoulder girdle. Pulley exercises by the

patient for any limitation of joint motion is especially worthwhile because it induces better relaxation on the patient's part. Better stretch of the restricted joint and a better opportunity for reciprocal motion is obtained. With a return of muscle power, assistive active exercises are most important to gain coordination and prevent substitution. Resistive exercises to strengthen the muscles should only be started after coordination has been established and the muscle can go through a full range of motion against gravity.

Heat, massage, and electrotherapy have little specific value. Occupational therapy is of tremendous value for functional activities of the hands as well as helping with the upper arm and shoulder.

A large percentage of patients need a short leg brace with a 90 degree ankle strap to control the drop foot and ankle clonus. In addition, if there is inversion of the foot, an outside T-strap placed well forward on the sole and cut back on an angle should be added to give the patient a level base on which to stand. Splints are often used for the fingers and wrists since flexor power usually returns first and the extensors are often overstretched.

Balance training should be started as soon as possible. Depending upon the diagnosis, the patient should first be elevated in bed, then over the side of the bed, and finally in a standing position. Standing and ambulation should not be attempted, however, until the patient has had sufficient return of power in the quadriceps to maintain the leg extended on the thigh against gravity and can lift the involved leg one to two inches off the bed. Usually, if the patient can stand alone, he will eventually walk. In walking, a heel-toe gait is most important.

After the initial phase, which should be devoted primarily to ambulation and functional activities, consideration should be given to the more specific question of vocational possibilities. 6 references.—*Author's abstract.*

Treating Migraine by "Sleep Rationing." MATTHIAS GANS, Tel-Aviv, Israel. J. Nerv. & Ment. Dis. 5:405-29, May 1951.

The author found that in susceptible persons most migraine attacks followed heavy, deep sleep. As a result, he instituted a therapy described as "sleep rationing" which consists in decreasing the depth and the length of sleep.

The optimum period of sleep for migraine patients was established at six and one half hours. For adolescents it is seven hours, and for children, eight.

It is of utmost importance that once a schedule has been fixed it should be strictly adhered to without the slightest change. This applies not only to the length of time the patient sleeps, but also to the hour at which the patient goes to sleep and gets up. He must always go to sleep and get up at the same time. Even if the patient for some reason goes to sleep at later than his usual hour, he must get up at the accustomed time. Lying in bed for any length of time before going to sleep and after waking is forbidden.

Napping during the day is strictly forbidden. As a substitute, however, the

patient may have one or two rest periods of 15 minutes each, spent comfortably seated, with closed eyes, in a chair.

The task of shortening the sleep of people who, like the migraine sufferers, are constantly tired and sleepy is by no means easy. It becomes easier as soon as the patient sees, after the application of sleep rationing, that he needs far less sleep and is more refreshed and less drowsy than he had been before.

A separate room with specially trained personnel is necessary. The patient is carefully watched by the nurse, and at the slightest indication of his falling into a deep sleep, such as unnatural body posture, sinking back of the head, or snoring, he is gently touched, whereupon he immediately returns to the superficial sleep level. This sleep supervision must be particularly careful during the last two hours. In cases where every sign of deep sleep is absent, the patients are awakened at regular intervals according to an individually prepared time schedule.

Because of the necessity for accurate and reliable sleep supervision, this therapy is only practicable in a hospital or sanatorium. For severe migraine cases this treatment should last approximately four weeks; it can be continued afterwards outside of the hospital. The essential character of the treatment is prophylactic. The first object should be to achieve as long a period as possible which is free not only of attacks of headache but also of its so-called equivalents. The longer the period in which this is true, the more assured is the continuing effect. The treatment is supported by auxiliary dietetic physical measures which are recorded in detail.

The author reports on 28 patients whom he treated by sleep rationing. Only serious cases in whom the attacks came on continuously and could not be influenced by any other known therapeutic measure were accepted for treatment.

Of these 28 cases the attacks stopped almost entirely in 14, and the remaining 12 were greatly improved. Two cases had to be interrupted because conditions were unsuitable.

Since treatment was carried out under unfavorable and primitive conditions, the author hopes that the results would be far better in suitably equipped treatment centers. 22 references.—*Author's abstract.*

MISCELLANEOUS

Medical Treatment of Psychomotor Epilepsy. JEROME K. MERLIS, Framingham, Mass. Neurology *1*:245-52, May-June 1951.

An exhaustive study of the literature has revealed that quantitative data on the drug treatment of epilepsy are rare. The total number of cases found was less than 400, distributed among many case series. Most of the case series consider only few cases, and for this and other reasons, are of questionable statistical validity. However, on the basis of available data, Dilantin, Tridione, Mesantoin, and Phenurone may be considered to be of some value in therapy.

All these drugs are toxic. In terms of mortality, the blood dyscrasias produced by the drugs represent the most serious toxic complication. A distinction must be made between toxic depression of the bone marrow producing a gradually-developing benign neutropenia and the explosive onset and malignant course of agranulocytosis or aplastic anemias. From experience with other drugs which produce blood dyscrasias, it is concluded that periodic blood counts are of little aid in reducing morbidity or mortality.

The safest of the anti-epileptic drugs are Dilantin and Phenobarbital. It is considered, therefore, that these are the drugs of first choice and should be thoroughly exploited. The other drugs should be used only after careful consideration, with the knowledge that occasional fatalities may be anticipated. 56 references. 2 tables.—*Author's abstract.*

An Improved Technic for Percutaneous Cerebral Angiography: A Preliminary Report. DAN C. DONALD, KARL F. KESMODEL, STACY L. ROLLINS, AND RICHARD M. PADDISON, Birmingham, Ala. Arch. Neurol. & Psychiat. *65*:508-10, April 1951.

The purpose of this article is to describe an improved technic for cerebral angiography which retains the advantages of the percutaneous method and at the same time eliminates the disadvantages of that method—excessive damage to the artery and the injection of the opaque medium into the soft tissues about the artery. A standard common carotid percutaneous puncture is performed with a special needle. A small opaque catheter is threaded through the needle and up the internal carotid under roentgenoscopic control. When the catheter is in a satisfactory position, the needle is completely withdrawn, permitting free and safe motion of the head. The opaque matter of choice is injected through the catheter and the desired roentgenograms made. The catheter may be left in place, kept open with saline or glucose, until the films are processed and checked; then further films can be made if needed. 1 reference. 2 figures.—*Author's abstract.*

Psychiatric Symptoms and Syndromes in Parkinson's Disease. ROBERT S. SCHWAB, HOWARD D. FABING, AND JOHN S. PRICHARD, Boston, Mass. Am. J. Psychiat. *107*:901-07, June 1951.

Psychiatric symptoms have been analyzed in 200 patients with Parkinson's Disease. It is found that they can be divided into four groups:

Group 1: Psychiatric disease unrelated to the Parkinson's Disease: for example, a person with a manic-depressive psychosis who happens to develop Parkinson's Disease at the same time. Group 2: Reactive mental disturbances. This is the reaction of a patient to a chronic illness. The nature of the illness is unimportant. Group 3: Psychiatric symptoms due to the medication. Hyoscine, Belladonna, Stramonium, and other medications used can produce acute confusional states. Group 4: Paroxysmal psychiatric disorders probably related to Parkinson's Disease.

These are the most interesting group. They include paroxysmal anxiety attacks, specific attacks of compulsive thinking, counting and use of words, paroxysmal depression, paroxysmal paranoid attacks, paroxysmal attacks of strange feelings in the limbs, schizoid reactions, and severe states of agitation and tension.

It is felt that these psychiatric syndromes provide an interesting link between organic disease of the brain and purely psychogenic disorders. As such, they are worthy of further study. 12 references.—*Author's abstract.*

book reviews

THE NEUROSES. Walter C. Alvarez. Philadelphia, W. B. Saunders Company, 1951. 667 pp. Price $10.00.

For many years, the writings of Doctor Alvarez have been familiar to American physicians. Not only is he an eminent gastroenterologist, but he has long typified the internist who is interested in the "patient as a whole," to use a phrase of the late Dr. William Alanson White. He has now given us a large volume designed to emphasize to his fellow internists the importance of psychologic factors in disease. Psychosomatic medicine, he points out, is far from new, but one must not overlook somatopsychic medicine: the psychologic effects of a physical disease may be more important than the disease itself!

He gives many pointers on taking a history, showing how important clues may be indicated by signs, mannerisms and data often overlooked. He emphasizes, among other points, the importance of what he refers to as "little strokes," that is, cerebral accidents affecting "silent" areas but leaving distinct personality damage. Many practical problems of dealing with the patient are discussed, all distilled from a long and rich experience. Appendices give the names and addresses of the state mental hygiene societies and state mental health authorities and a brief abstract of desirable commitment procedures (unfortunately the Draft Act prepared by the Federal Security Agency is not mentioned).

Doctor Alvarez leans strongly to the organic viewpoint, as against the psychodynamic. He stresses "trouble in the brain," a "hereditary and inborn tendency to get nervous," and "poor nervous heredity." One could wish, too, that he did not advise finding a "suitable asylum." The book, nevertheless, is a valuable contribution by a nonpsychiatrist for the benefit of non-psychiatrists. It could be read with great profit by all practising physicians and should be prescribed reading for medical students.—*Winfred Overholser, M.D.*

THE INTEGRATION OF PSYCHIATRY AND MEDICINE. William B. Terhune. New York, Grune and Stratton, 1951. 177 pp. Price $2.75.

This handy volume presents the substance of a series of lectures given to a group of physicians—internists, surgeons, obstetricians, other specialists, and general practitioners—and is designed to present to the nonpsychiatric physician the ele-

ments of psychiatry and its close relationship with general medicine. The author has had a long and successful experience in dealing with patients whose complaints are largely of a "psychosomatic" nature, and he has done much in his practice to emphasize the importance of comprehensive medicine.

The titles of the chapters indicate the scope of the book: Comprehensive Medicine; Psychodynamics; Psychotherapy in General Practice; The Physiological Aspects of Psychiatry; Psychosomatic Medicine; The Psychosomatic History; Personal Mental Hygiene; The Ideals of Medical Practice. He emphasizes throughout the importance of considering both the physiologic and the psychologic aspects of the patient; that psychoneuroses and physiologic disorders often exist coincidentally, each aggravating the other, and that this truth must be borne in mind by internist, surgeon, and psychiatrist alike.

A very useful chapter to the general practitioner is the one on personal mental hygiene, discussing the adaptive mechanism and general symptoms of nervousness.

The various physical approaches to psychiatric treatment, such as E.C.T. insulin, sedatives, and leukotomy, are conservatively discussed. The psychodynamics is essentially Meyerian. Although Meyer and Jung are mentioned in the text, Freud is not, and psychoanalysis is disposed of in one short paragraph.

The book is a welcome addition to the literature designed to orient the medical profession to the holistic or organism-as-a-whole (to use White's term) approach. It is highly readable and convincing and reflects a wide experience.—*Winfred Overholser, M.D.*

notes and announcements

FREUD ARCHIVES

The Sigmund Freud Archives, organized by a group of internationally eminent psychoanalysts, was incorporated in the State of New York on February 14, 1951. The aim, as stated in the Charter, is "to discover, assemble, collect and preserve manuscripts, publications, and other documents and information relating to the biography of the late Sigmund Freud, and to his medical, psychoanalytic, and other scientific activities." This is the first attempt to obtain and preserve for posterity a complete compilation of Freud's published and unpublished writings. Under an agreement with the Library of Congress, which will serve as curator of the collection, confidential material will be restricted as per the request of the donor.

The initial projects of the Archives include collecting all letters to and from Freud; establishing a complete and reliable bibliography of his writings; interviewing all persons who knew Freud personally, regardless of how well they knew him or in what function, whether as friend, brief acquaintance, or patient.

Anyone who is in possession of his letters or who knows of persons who have such letters, as well as all those who knew Freud personally, are urged to contact the Archives at 575 Madison Ave., New York City 22.

OBITUARY

Dr. Vernon C. Branham died in Washington, D. C., on October 23, 1951. He was active in his duties until October 22nd as Chief of the out-patient section of the Division of Psychiatry and Neurology, Central Office, Veterans Administration, Washington, D. C.

Dr. Branham was born on May 26, 1889, in Denver, Colorado. Educated in the schools of Denver, he received his Bachelor of Arts from the University of Colorado in 1913. During the following two years, he did graduate work in chemistry, receiving a Master of Science degree from the University of Denver in 1914, and a Master of Arts degree from Columbia University in 1915. He then entered medical school and received his degree in 1919 from the University of Colorado. Following his graduation from medical school, he served a one year interneship at St. Elizabeths Hospital in Washington, D. C., where his interest in psychiatry became established under the influence of Dr. William Alanson White. He then joined the out-patient department staff of the Cornell Medical School where he served until 1923, when he became superintendent of the Institute for Male Delinquents, Napanoch, New York. His activities for the next twenty-three years centered about the care of defective delinquents and furthering mental hygiene programs. In the ten years from 1924 to 1934 he was, in turn, director of the State Commission for Mental Defectives, director of the New York State and City Commissions for Mental Hygiene, and Deputy Commissioner of Correction for New York State in charge of the psychiatric service for prisons. He was appointed superintendent of Woodbourne Institute for Defective Delinquents in 1935 and remained in this position until 1947. During the past four years, he engaged untiringly in the development of Veterans Administration mental hygiene clinics throughout the country.

While superintendent of the Woodbourne Institute for the Defective Delinquent, he recognized the need for a publication which would collect the observations and thinking of those in the profession who assumed the responsibility of care and treatment of the individual whose behavior presented a social problem. As a result, he published and edited "The Journal of Criminal Psychopathology." One of his editorial policies was to have an excellent abstract section. Later he widened the scope of the material of his original publication and changed the name to the "Journal of Clinical Psychopathology." He wrote a treatise on "The Classification and Treatment of Defective Delinquents" and other articles allied to this subject. In 1949, he edited the "Encyclopedia of Criminology," with Samuel Kutash, Ph.D.

He was a man of quiet, easy manner which belied the dynamic force of the character and abilities which made him so effective a pioneer. He was always alert to the needs of his programs and flexible in adopting procedures to enhance their effectiveness. He will be remembered for his friendly smile and soft-spoken greeting by those who knew him, as well as his persistent effort to assist those who were his associates.

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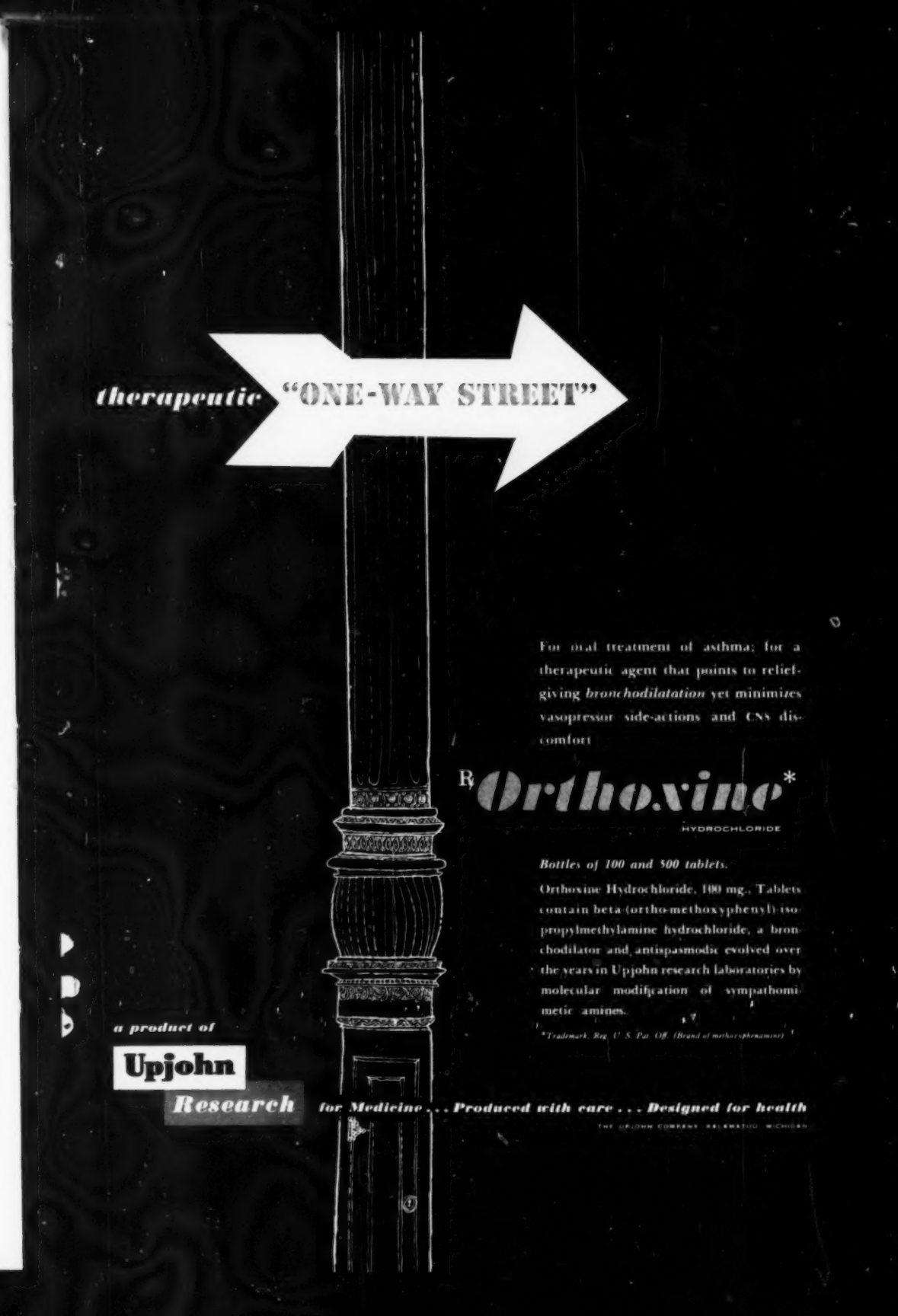
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